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Water Resources Data for New Jersey Water Year 1979. Volume 1: Atlantic Slope Basins, Hudson River to Cape May

(U.S.) Geological Survey
Trenton, NJ

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PB81-119802

U.S. DEPARTMENT OF THE INTERIOR
March 3, 1849

Water Resources Data for New Jersey

Volume 1. Atlantic Slope Basins, Hudson River to Cape May

U.S. GEOLOGICAL SURVEY WATER-DATA REPORT NJ-79-1

WATER YEAR 1979

Prepared in cooperation with the New Jersey Department of Environmental Protection and with other agencies

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CALENDAR FOR WATER YEAR 1979

1978

OCTOBER

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1979

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Water Resources data for the 1979 water year for New Jersey consist of records of stage, discharge, and water quality of streams; stage, contents, and water quality of lakes and reservoirs; and water levels and water quality of ground water. This volume of the report contains discharge records for 75 gaging stations; tide summaries for one (1) station; stage and contents for 15 lakes and reservoirs; water quality for 111 surface water sites and 110 wells; and water levels for 35 observation wells. Also included are data for 44 crest-stage partial-record stations and 47 low-flow partial-record stations. Additional water data were collected at various sites, not part of the systematic data collection program, and are published as miscellaneous measurements. These data represent that part of the national water data system operated by the U.S. Geological Survey and cooperating State and Federal agencies in New Jersey.

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Water Resources Data for New Jersey

Volume 1. Atlantic Slope Basins, Hudson River to Cape May

U.S. GEOLOGICAL SURVEY WATER-DATA REPORT NJ-79-1

WATER YEAR 1979

Prepared in cooperation with the New Jersey
Department of Environmental Protection and
with other agencies

ja

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GEOLOGICAL SURVEY

H. William Menard, Director

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1980

PREFACE

This report was prepared by the U.S. Geological Survey in cooperation with the State of New Jersey and with other agencies by personnel of the New Jersey district of the Water Resources Division under the supervision of D. E. Vaupel, District Chief, and J. E Biesecker, Regional Hydrologist, Northeastern Region.

This report is one of a series issued State by State under the general direction of Philip Cohen, Chief Hydrologist,U.S. Geological Survey, and R. J. Dingman, Assistant Chief Hydrologist for Scientific Publications and Data Management.

Data for New Jersey are in two volumes as follows:

Volume 1. Atlantic Slope Basins, Hudson River to Cape May
Volume 2. Delaware River Basin and Tributaries to Delaware Bay

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SURFACE WATER STATIONS, IN DOWNSTREAM ORDER, FOR WHICH RECORDS ARE PUBLISHED

[Letter after station name designates type of data: (d) discharge, (c) chemical, (b) biological,
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INTRODUCTION

Water resources data for the 1979 water year for New Jersey consist of records of stage, discharge, and water quality of streams; stage, contents, and water quality of lakes and reservoirs; and water levels and water quality of ground water. This volume of the report contains discharge records for 75 gaging stations; tide summaries for 1 station; stage and contents for 15 lakes and reservoirs; water quality for 111 surface water sites and 110 wells; and water levels for 35 observation wells. Also included are data for 44 crest-stage partial-record stations and 47 low-flow partial-record stations. Additional water data were collected at various sites, not part of the systematic data collection program, and are published as miscellaneous measurements. These data represent that part of the National Water Data System operated by the U.S. Geological Survey and cooperating State and Federal agencies in New Jersey.

Records of discharge or stage of streams, and contents or stage of lakes and reservoirs were first published in a series of U.S. Geological Survey water-supply papers entitled, "Surface Water Supply of the United States." Through water year 1960, these water-supply papers were in an annual series and then in a 5-year series for 1961-65 and 1966-70. Records of chemical quality, water temperatures, and suspended sediment were published from 1941 to 1970 in an annual series of water-supply papers entitled, "Quality of Surface Waters of the United States." Records of ground-water levels were published from 1935 to 1974 in a series of water-supply papers entitled "Ground-Water Levels in the United States." Water-supply papers may be consulted in the libraries of the principal cities in the United States or may be purchased from Branch of Distribution, U.S. Geological Survey, 1200 South Eads Street, Arlington, VA 22202.

For water years 1961 through 1974, streamflow data were released by the Geological Survey in annual reports on a State-boundary basis. Water-quality records for water years 1964 through 1974 were similarly released either in separate reports or in conjunction with streamflow records.

Beginning with the 1975 water year, water data for streamflow, water quality, and ground water are published as an offical Survey report on a State-boundary basis. These offical Survey reports carry an identification number consisting of the two letter State abbreviation, the last two digits of the water year, and the volume number. For example, this volume of the report is identified as "U.S. Geological Survey Water-Data Report NJ-79-1."

For archiving and general distribution, the reports for water years 1971-74 are also identified as water-data reports. These water-data reports are for sale, in paper copy or in microfiche by the National Technical Information Service, U.S. Department of Commerce, Springfield, VA 22161.

Additional information, including current prices, for ordering specific reports may be obtained from the district chief at the address given on the back of the title page or by telephone (609) 989-2162.

COOPERATION

This report was prepared by the U.S. Geological Survey under cooperative agreement with the following organizations:

New Jersey Department of Environmental Protection, Jerry F. English, commissioner.
  Division of Water Resources, Arnold Schiffman, director.
  Division of Fish, Game and Wildlife, Russell A. Cookingham, director.
New Jersey Department of Agriculture, Phillip Alampi, secretary.
  Division of Rural Resources, Richard D. Chumney, director.
Delaware River Basin Commission, Gerald M. Hansler, executive director.
North Jersey District Water Supply Commission, Dean C. Noll, chief engineer.
Passaic Valley Water Commission, W.E. Inhoffer, general superintendent and chief engineer.
County of Bergen, V.J. Nunno, director of Public Works and E.R. Ranuska, county engineer.
County of Camden, Joseph T. Patermo, director of Camden County Planning Board.
County of Morris, James Plante, chairman of Morris County Municipal Utilities Authority.
County of Somerset, Thomas E. Decker, county engineer, and Thomas Harris, administrative engineer.
Township of West Windsor, Larry Ellery, chairman of Environmental Commission.

Assistance in the form of funds was given by the Corps of Engineers, U.S. Army, in collecting records for 50 surface water stations, and for the collection of sediment records at one stream-sampling station, and by the U.S. Environmental Protection Agency for the collection of chemical analyses at four stream-sampling stations. In addition, several stations were operated fully or partially from funds appropriated directly to the Geological Survey. Assistance was also furnished by the National Weather Service and the National Ocean Survey.

The following organizations aided in collecting records:

Municipalities of Atlantic City, Jersey City, Newark and New Brunswick; American Cyanamid Co.; Elizabethtown Water Co.; Hackensack Water Co.; Johns-Manville Products Corp.; and Monmouth Consolidated Water Co.

Organizations that supplied data are acknowledged in station descriptions.

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HYDROLOGIC CONDITIONS

In the beginning of 1979 water year, streamflow was within the normal range throughout New Jersey. But in January precipitation being as much as 300 percent of normal caused streams to rise unusally high. On January 21 and 25 mild temperatures and heavy rain in northern, New Jersey caused heavy flooding in the Passaic, Raritan and Delaware River basin, reaching new peak stages or discharges at some sites. A cold spell in early February caused freezing but on February 24 heavy rains and ice jams again resulted in overbank flooding in northern New Jersey. Recurrence intervals exceeded 100 years at some sites. These floods and high runoff from storms in May and September resulted in above normal streamflow for the water year.

Monthly and annual discharge is compared with medians at three representative gaging stations in figures 2 and 3. The streamflow stations chosen for illustration were South Branch Raritan River near High Bridge and Great Egg Harbor River at Folsom, which reflect runoff conditions in the northern and southern parts of the State, respectively, and Delaware River at Trenton in which there is widespread interest.

Streamflow at South Branch Raritan River near High Bridge for the year averaged 167 ft^3/s (4.73 m^3/s), 138 percent of normal. The average flow for Great Egg Harbor River at Folsom was 113 ft^3/s (3.20 m^3/s), 130 percent of normal. The observed annual mean discharge on the Delaware River at Trenton was 13,770 ft^3/s (390.0 m^3/s), 117 percent of normal. The natural flow at Trenton (adjusted for diversion and storage upstream) was 128 percent of normal for the year.

Storage in the 13 major water-supply reservoirs in New Jersey increased from 56.5 billion gallons (75 percent of capacity) on October 1 to 67.9 billion gallons (70 percent of capacity) on September 30. Storage in Wanaque Reservoir increased from 17.5 billion gallons (63 percent of capacity) on October 1 to 24.2 billion gallons (87 percent of capacity) on September 30. Pumped storage in Round Valley Reservoir on September 30 was 54.5 billion gallons (99 percent of capacity), an increase of 2.1 billion gallons during the year.

Ground-water aquifers under water table conditions generally exhibited water levels slightly above average during the year. In the more heavily stressed artesian aquifers, a continued downward trend was noted in some wells. However, the seasonal lows this year in the heavily pumped Magothy-Raritan Formation were about 2 to 6 ft (.6 to 1.8 m) higher than the comparable period in the 1977 water year.

Water levels in aquifers under water table conditions generally were above normal in the Coastal Plain portion of the State. Water levels in the heavily stressed artesian aquifers; however, continued to be lower than normal in the Coastal Plain. Continuing declines in water levels were most notable in the Englishtown aquifer and aqufiers in the Potomac-Raritan-Magothy aquifer system down dip in the eastern areas. To the west water levels in most artesian aquifers have risen slightly since record lows were established near the end of the 1977 water year. North of the Fall Line water levels in water-table and semi-artesian aquifers varied from near normal to moderately below normal.

DEFINITION OF TERMS

Terms related to streamflow, water-quality and other hydrologic data, as used in this report, are defined below. See also the table for converting Inch-pound Units to Metric Units on the inside of the back cover.

Acre-foot (AC-FT, acre-ft) is the quantity of water required to cover 1 acre to a depth of 1 foot and is equivalent to 43,560 cubic feet or about 326,000 gallons or 1,233 cubic meters.

Adenosine triphosphate (ATP) is the primary energy donor in cellular life processes. Its central role in living cells makes it an excellent indicator of the presence of living material in water. A measure of ATP therefore provides a sensitive and rapid estimate of biomass. ATP is reported in micrograms per liter of the original water sample.

Algae are mostly aquatic single-celled, colonial, or multi-celled plants, containing chlorophyll and lacking roots, stems, and leaves.

Algal growth potential (AGP) is the maximum algal dry weight biomass that can be produced in a natural water sample under standardized laboratory conditions. The growth potential is the algal biomass present at stationary phase and is expressed as milligrams dry weight of algae produced per liter of sample.

Aquifer is a geologic formation, group of formations, or part of a formation that contains sufficient saturated permeable material to yield significant quantities of water to wells and springs.

Aquifer codes and geologic names:

The following list shows the aquifer codes and geologic names of the formations in which the sampled wells are finished. The aquifer codes also appear in the column "Geologic Unit" in the ground-water quality tables:

112CPMY , CAPE MAY FORMATION, UNDIFFERENTIATED
112ERNS , CAPE MAY FORMATION, ESTURINE SAND FACIES
112PLCC , PLEISTOCENE-COHANSEY SAND, UNDIFFERENTIATED
121CNSY , COHANSEY SAND
121CKKD , COHANSEY SAND-KIRKWOOD FORMATION, UNDIFFERENTIATED
122KRKDU, KIRKWOOD FORMATION, UPPER SAND
122KRKD , KIRKWOOD FORMATION
122KRKDL, KIRKWOOD FORMATION, LOWER SAND
124MQVC , MANASQUAN-VINCENTOWN FORMATION, UNDIFFERENTIATED
124PNPN , PINEY POINT FORMATION

211MLRW , MOUNT LAUREL SAND-WENONAH FORMATION
211EGLS , ENGLISHTOWN FORMATION
211MGRR , POTOMAC-RARITAN-MAGOTHY AQUIFER SYSTEM FORMATIONS
211ODBG , MAGOTHY FORMATION, OLD BRIDGE SAND MEMBER
211FRNG , RARITAN FORMATION, FARRINGTON SAND MEMBER

Artesian means confined and is used to describe a well in which the water level stands above the top of the aquifer, tapped by the well. A flowing artesian well is one in which the water level is above land surface.

Bacteria are microscopic unicellular organisms, typically spherical, rod-like, or spiral and threadlike in shape, often clumped into colonies. Some bacteria cause disease, other perform an essential role in nature in the recycling of materials; for example, by decomposing organic matter into a form available for reuse by plants.

Total coliform bacteria are a particular group of bacteria that are used as indicators of possible sewage pollution. They are characterized as aerobic or facultative anaerobic, gram-negative, nonspore-forming, rod-shaped bacteria which ferment lactose with gas formation within 48 hours at 35°C. In the laboratory these bacteria are defined as all the organisms which produce colonies with a golden-green metallic sheen within 24 hours when incubated at 35°C ± 0.5°C on M-Endo medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 ml of sample.

Fecal coliform bacteria are bacteria that are present in the intestines or feces of warmblooded animals. They are often used as indicators of the sanitary quality of the water. In the laboratory they are defined as all organisms which produce blue colonies within 24 hours when incubated at 44.5°C ± 0.2°C on M-FC medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 ml of sample.

Fecal streptococcal bacteria are bacteria found also in the intestines of warm-blooded animals. Their presence in water is considered to verify fecal pollution. They are characterized as gram-positive, cocci bacteria which are capable of growth in brain-heart infusion broth. In the laboratory they are defined as all the organisms which produce red or pink colonies within 48 hours at 35°C ± 0.5°C on KF streptococcus medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 ml of sample.

Bedload is the sediment which moves along in essentially continuous contact with the streambed by rolling, sliding, and making brief excursions into the flow a few diameters above the bed.

Bed material is the unconsolidated material of which a streambed, lake, pond, reservoir, or estuary bottom is composed.

Biochemical oxygen demand (BOD) is a measure of the quantity of dissolved oxygen, in milligrams per liter, used for the decomposition of organic matter by microorganisms, such as bacteria.

Biomass is the amount of living matter present at any given time, expressed as the weight per unit area or volume of habitat.

Ash mass is the mass or amount of residue present after the residue from the dry mass determination has been ashed in a muffle furnace at a temperature of 500°C for 1 hour. The ash mass values of zooplankton and phytoplankton are expressed in grams per cubic meter (g/m^3) and periphyton and benthic organisms in grams per square meter (g/m^2).

Dry mass refers to the mass of residue present after drying in an oven at 60°C for zooplankton and 105°C for periphyton, until the mass remains unchanged. This mass represents the total organic matter, ash and sediment, in the sample. Dry mass values are expressed in the same units as ash mass.

Organic mass or volatile mass of the living substance is the difference between the dry mass and the ash mass, and represents the actual mass of the living matter. The organic mass is expressed in the same units as for ash mass and dry mass.

Wet mass is the mass of living matter plus contained water.

Bottom material: See Bed material.

Cells/volume refers to the number of cells of any organism which is counted by using a microscope and grid or counting cell. Many planktonic organisms are multicelled and are counted according to the number of contained cells per sample, usually milliliters (mL) or liters (L).

Cfs-day is the volume of water represented by flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, approximately 1.9835 acre-feet, about 646,000 gallons or 2,447 cubic meters.

Chemical oxygen demand (COD) is a measure of the quantity of organic matter which can be chemically oxidized in the presence of a strong oxidant.

Chlorophyll refers to the green pigments of plants. Chlorophyll *a* and *b* are the two most common pigments in plants.

Color unit is produced by one milligram per liter of platinum in the form of the chloroplatinate ion. Color is expressed in units of the platinum-cobalt scale.

Contents is the volume of water in a reservoir or lake. Unless otherwise indicated, volume is computed on the basis of a level pool and does not include bank storage.

Continuing record station is a specified site which meets one or all conditions listed:

1. When chemical samples are collected daily or monthly for 10 or more months during the water year.
2. When water temperature records include observations taken one or more times daily.
3. When sediment discharge records include periods for which sediment loads are computed and are considered to be representative of the runoff for the water year.

Control designates a feature downstream from the gage that determines the stage-discharge relation at the gage. This feature may be a natural constriction of the channel, an artificial structure, or a uniform cross section over a long reach of the channel.

Control structure as used in this report is a structure on a stream or canal that is used to regulate the flow or stage of the stream or to prevent the intrusion of salt water.

Cubic feet per second per square mile (CFSM) is the average number of cubic feet of water flowing per second from each square mile of area drained, assuming that the runoff is distributed uniformly in time and area.

Cubic foot per second (ft³/s, cfs) is the rate of discharge representing a volume 1 cubic foot passing a given point during 1 second, and is equivalent to 7.48 gallons per second or 448.8 gallons per minute.

Depth of well:

Total depth of well is the maximum depth in feet below land surface datum (lsd) at which the well was originally finished. This depth may be slightly deeper than "depth to the bottom of sample interval" because many wells have a "tailpiece" or short length of casing installed below the well screen.

Total depth of hole is the total depth in feet below land surface datum to which the hole was drilled, regardless of the finished depth of the well.

Depth to the top of water-bearing zone is the depth in feet, based on the best available information which indicates the top of the water-bearing zone that is furnishing water to the well.

Depth to bottom of water-bearing zone is the depth in feet, based on the best available information which indicates the bottom of the water-bearing zone that is furnishing water to the well.

Depth to the top of sample interval is the uppermost point in a fully cased well at which water can enter the well. In bedded sediments this is usually the uppermost part of the screened interval. In some wells the top of the well screen is installed inside and a few feet above the bottom of the casing. Under these conditions the bottom of the casing is considered to be the top of the sample interval.

Depth to the bottom of sample interval is the lowermost point in a fully cased well at which water can enter the well.

Discharge is the volume of water (or more broadly, volume of fluid plus suspended sediment), that passes a given point within a given period of time.

Mean discharge (Mean) is the arithmetic mean of individual daily mean discharge during a specific period.

Instantaneous discharge is the discharge at a particular instant of time.

Dissolved refers to that material in a representative water sample which passes through a 0.45 µm membrane filter. This is a convenient operational definition used by Federal agencies that collect water data. Determinations of "dissolved" constituents are made on subsamples of the filtrate.

Diversity index is a numerical expression of the evenness of distribution of aquatic organisms. The formula for diversity index is:

$$\bar{d} = -\sum_{i=1}^{s} \frac{n_i}{n} \log_2 \frac{n_i}{n}$$

where n_i is the number of individuals per taxon, n is the total number of individuals, and s is the total number of taxa in the sample of the community. Diversity index values range from zero, when all the organisms in the sample are the same, to some positive number, when some or all of the organisms in the sample are different.

Drainage area of a stream at a specified location is that area, measured in a horizontal plane, enclosed by a topographic divide from which direct surface runoff from precipitation normally drains by gravity into the stream above the specified point. Figures of drainage area given herein include all closed basins, or noncontributing areas, within the area unless otherwise noted.

Drainage basin is a part of the surface of the earth that is occupied by a drainage system, which consists of a surface stream or body of impounded surface water together with all tributary surface streams and bodies of impounded surface water.

Gage height (G.H.) is the water-surface elevation referred to some arbitrary gage datum. Gage height is often used interchangeably with the more general term "stage," although gage height is more appropriate when used with a reading on a gage.

Gaging station is a particular site on a stream, canal, lake, or reservoir where systematic observations of gage height or discharge are obtained. When used in connection with a discharge record, the term is applied only to those gaging stations where a continuous record of discharge is obtained.

Hardness of water is a physical-chemical characteristic that is commonly recognized by the increased quantity of soap required to produce lather. It is attributable to the presence of alkaline earths (principally calcium and magnesium) and is expressed as equivalent calcium carbonate ($CaCO_3$).

High tide is the maximum height reached by each rising tide.

Hydrologic unit is a geographic area representing part or all of a surface drainage basin or distinct hydrologic feature as delineated by the Office of Water Data Coordination on the State Hydrologic Unit Maps; each hydrologic unit is identified by an 8-digit number.

Instantaneous flow rate is the flow rate at which water is removed from the well. Used with pump or flow period prior to sampling (see below) so that the exact volume of water pumped prior to sampling can be determined.

Land-surface datum is a datum plane that is approximately at the land surface at the well.

Low tide is the minimum height reached by each falling tide.

Mean high or low tide is the average of all high or low tides, respectively, over a specified period.

Metamorphic stage refers to the stage of development that an organism exhibits during its transformation from an immature form to an adult form. This developmental process exists for most insects, and the degree of difference from the immature stage to the adult form varies from relatively slight to pronounced, with many intermediates. Examples of metamorphic stages of insects are egg-larva-adult or egg-nymph-adult.

Methylene blue active substance (MBAS) is a measure of apparent detergents. This determination depends on the formation of a blue color when methylene blue dye reacts with synthetic detergent compounds.

Micrograms per gram (UG/G) is a unit expressing the concentration of a chemical element as the weight (micrograms) of the element sorbed per unit weight (gram) of sediment.

Micrograms per liter (UG/L, µg/L) is a unit expressing the concentration of chemical constituents in solution as weight (micrograms) of solute per unit volume (liter) of water. One thousand micrograms per liter is equivalent to one milligram per liter.

Milligrams per liter (MG/L, mg/L) is a unit for expressing the concentration of chemical constituents in solution. Milligrams per liter represents the weight of solute per unit volume of water. Milligrams or micrograms per liter may be converted to milliequivalents (one thousandth of a gram-equivalent weight of a constituent) per liter by multiplying by the factors in Hem(1970).

National Geodetic Vertical Datum of 1929 (NGVD), is a geodetic datum derived from a general adjustment of the first order level nets of both the United States and Canada. It was formerly called "Sea Level Datum of 1929" or "mean sea level" in this series of reports. Although the datum was derived from the average sea level over a period of many years at 26 tide stations along the Atlantic, Gulf of Mexico, and Pacific Coasts, it does not necessarily represent local mean sea level at any particular place.

Organism is any living entity, such as an insect, phytoplankter, or zooplankter.

Organism count/area refers to the number of organisms collected and enumerated in a sample and adjusted to the number per area habitat, usually square meters (m^2), acres, or hectares. Periphyton, benthic organisms, and macrophytes are expressed in these terms.

Organism count/volume refers to the number of organisms collected and enumerated in a sample and adjusted to the number per sample volume, usually milliliters (mL) or liters (L). Numbers of planktonic organisms can be expressed in these terms.

Total organism count is the total number of organisms collected and enumerated in any particular sample.

Partial-record station is a particular site where limited streamflow data are collected systematically over a period of years for use in hydrologic analyses.

Particle size is the diameter, in millimeters (mm), of suspended sediment or bed material determined either by sieve or sedimentation methods. Sedimentation methods (pipet, bottom-withdrawal tube, visual-accumulation tube) determine fall diameter of particles in either distilled water (chemically dispersed) or in native water (the river water at the time and point of sampling).

Particle-size classification used in this report agrees with recommendations made by the American Geophysical Union Subcommittee on Sediment Terminology. The classification is as follows:

Classification	Size (mm)	Method of analysis
Clay...........	0.00024 - 0.004	Sedimentation.
Silt...........	.004 - .062	Sedimentation.
Sand...........	.062 - 2.0	Sedimentation or sieve.
Gravel.........	2.0 - 64.0	Sieve.

The particle-size distributions given in this report are not necessarily representative of all particles in transport in the stream. Most of the organic material is removed and the sample is subjected to mechanical and chemical dispersion before analysis in distilled water. Chemical dispersion is not used for native-water analysis.

Percent composition is a unit for expressing the ratio of a particular part of a sample or population to the total sample or population, in terms of types, numbers, mass or volume.

Periphyton is the assemblage of microorganisms attached to and growing upon solid surfaces. While primarily consisting of algae, they also include bacteria, fungi, protozoa, rotifers, and other small organisms. Periphyton is a useful indicator of water quality.

Pesticides are chemical compounds used to control the growth of undesirable plants and animals. Major categories of pesticides include insecticides, miticides, fungicides, herbicides, and rodenticides. Since the first application of DDT as an insecticide in the early 1930's there have been almost 60,000 pesticide formulations registered, each containing at least one of the approximately 900 different basic pesticide compounds. The United States annually produces about 1 billion pounds of these compounds. Although efforts are being made to substitute many of the chlorinated hydrocarbon pesticides with more specific, fast-acting, and easily degradable compounds, chlorinated hydrocarbon pesticides are still commonly used in many areas of the country.

Picocurie (PCi, pCi) is one trillionth (1×10^{-12}) of the amount of radioactivity represented by a curie (Ci). A curie is the amount of radioactivity that yields 3.7×10^{10} radioactive disintegrations per second. A picocurie yields 2.22 dpm (disintegrations per minute).

Plankton is the community of suspended, floating, or weakly swimming organisms that live in the open water of lakes and rivers.

Phytoplankton is the plant part of the plankton. They are usually microscopic and their movement is subject to the water currents. Phytoplankton growth is dependent upon solar radiation and nutrient substances. Because they are able to incorporate as well as release materials to the surrounding water, the phytoplankton have a profound effect upon the quality of the water. They are the primary food producers in the aquatic environment, and are commonly known as algae.

Blue-green algae are a group of phytoplankton organisms having a blue pigment, in addition to the green pigment called chlorophyll. Blue-green algae often cause nuisance conditions in water.

Diatoms are the unicellular or colonial algae having a siliceous shell. Their concentrations are expressed as number of cells per milliliter of sample.

Green algae have chlorophyll pigments similar in color to those of higher green plants. Some forms produce algal mats or floating "moss" in lakes. Their concentrations are expressed as number of cells per milliliter of sample.

Zooplankton is the animal part of the plankton. Zooplankton are capable of extensive movements within the water column, and are often large enough to be seen with the unaided eye. Zooplankton are secondary consumers feeding upon bacteria, phytoplankton, and detritus. Because they are the grazers in the aquatic environment, the zooplankton are a vital part of the aquatic food web. The zooplankton community is dominated by small crustaceans and rotifers.

Polychlorinated biphenyls (PCBs) are industrial chemicals that are mixtures of chlorinated biphenyl compounds having various percentages of chlorine. They are similar in structure to organochlorine insecticides.

Primary productivity is a measure of the rate at which new organic matter is formed and accumulated through photosynthetic and chemosynthetic activity of producer organisms (chiefly green plants). The rate of primary production is estimated by measuring the amount of oxygen released (oxygen method) or the amount of carbon assimilated by the plants (carbon method).

Milligrams of carbon per area or volume per unit time [mg C/m^2/time for periphyton and macrophytes and mg C/m^3/time for phytoplankton] are units for expressing primary productivity. They define the amount of carbon dioxide consumed as measured by radioactive carbon (carbon 14). The carbon 14 method is of greater sensitivity that the oxygen light and dark bottle method, and is preferred for use in unenriched waters. Unit time may be either the hour or day, depending on the incubation period.

Milligrams of oxygen per area or volume per unit time [mg O_2/m^2/time for periphyton and macrophytes and mg O_2/m^3/time for phytoplankton] are the units for expressing primary productivity. They define production and respiration rates as estimated from changes in the measured dissolved oxygen concentration. The oxygen light and dark bottle method is preferred if the rate of primary production is sufficient for accurate measurements to be made within 24 hours. Unit time may be either the hour or day, depending on the incubation period.

Pump or flow rate prior to sampling is used in conjunction with the instantaneous flow rate so that the exact volume of water pumped prior to sampling can be determined.

Radioisotopes are isotope forms of an element that exhibit radioactivity. Isotopes are varieties of a chemical element that differ in atomic weight, but are very nearly alike in chemical properties. The difference arises because the atoms of the isotopic forms of an element differ in the number of neutrons in the nucleus. For example: ordinary chlorine is a mixture of isotopes having atomic weights 35 and 37, with the natural mixture having an atomic weight of 35.453.

Radioisotopes that are determined in this report are natural uranium in ug/L (micrograms per liter), radium as radium-226 in PCI/L, (pCi/L, picocuries per liter), gross beta in PCI/L, and gross alpha radiation as micrograms of uranium equivalent per liter (ug/L). Gross alpha and beta radioactivity associated with the fine grained (silt and clay sized) sediments in the samples are also determined.

River mile as used herein, is the distance above the mouth of Delaware Bay, measured along the center line of the navigation channel of the main stem of the Delaware River. River mile data were furnished by the Delaware River Basin Commission.

Runoff in inches (IN, in) shows the depth to which the drainage area would be covered if all the runoff for a given time period were uniformly distributed on it.

Sediment is solid material that originates mostly from disintegrated rocks and is transported by, suspended in, or deposited from water; it includes chemical and biochemical precipitates and decomposed organic material, such as humus. The quantity, characteristics, and cause of the occurrence of sediment in streams are influenced by environmental factors. Some major factors are degree of slope, length of slope, soil characteristics, land usage, and quantity and intensity of precipitation.

Suspended sediment is the sediment that at any given time is maintained in suspension by the upward components of turbulent currents or that exists in suspension as a colloid.

Suspended-sediment concentration is the velocity-weighted concentration of suspended sediment in the sampled zone (from the water surface to a point approximately 0.3 ft above the bed) expressed as milligrams of dry sediment per liter of water-sediment mixture (mg/L).

Suspended-sediment discharge (tons/day) is the rate at which dry weight of sediment passes a section of a stream or is the quantity of sediment, as measured by dry weight, or by volume, that is discharged in a given time. It is computed by multiplying discharge times mg/L times 0.0027.

Suspended-sediment load is quantity of suspended sediment passing a section in a specified period.

Total sediment discharge (tons/day) is the sum of the suspended-sediment discharge and the bed-load discharge. It is the total quantity of sediment, as measured by dry weight or volume, that passes a section during a given time.

Mean concentration is the time-weighted concentration of suspended sediment passing a stream section during a 24-hour day.

Solute is any substance derived from the atmosphere, vegetation, soil, or rocks that is dissolved in water.

Specific conductance is a measure of the ability of a water to conduct an electrical current and is expressed in micromhos per centimeter at 25°C. Because the specific conductance is related to the number and specific chemical types of ions in solution, it can be used for approximating the dissolved-solids content of the water. Commonly, the amount of dissolved solids (in milligrams per liter) is about 65 percent of the specific conductance (in micromhos per cm at 25°C). This relation is not constant from stream to stream or from well to well, and it may even vary in the same source with changes in the composition of the water.

Stage-discharge relation is the relation between gage height and the amount of water flowing in a channel, expressed as volume per unit of time.

Streamflow is the discharge that occurs in a natural channel. Although the term "discharge" can be applied to the flow of a canal, the word "streamflow" uniquely describes the discharge in a surface stream course. The term "streamflow" is more general than "runoff." Streamflow may be applied to discharge whether or not it is affected by diversion or regulation.

Substrate is the physical surface upon which an organism lived.

Natural substrate refers to any naturally occurring emersed or submersed solid surface, such as a rock or tree, upon which an organism lived.

Artificial substrate is a device which is purposely placed in a stream or lake for colonization by organisms. The artificial substrate simplifies the community structure by standardizing the substrate from which each sample is taken. Examples of artificial substrates are basket samplers (made of wire cages filled with clean streamside rocks) and multi-plate samplers (made of hardboard) for benthic organism collection, and plexiglass strips for periphyton collection.

Surface area of a lake is that area outlined on the latest U.S.G.S. topographic map as the boundary of the lake and measured by a planimeter in acres. In localities not covered by topographic maps, the areas are computed from the best maps available at the time planimetered. All areas shown are those for the stage when the planimetered map was made.

Surficial bed material is that part (0.1 to 0.2 ft) of the bed material that is sampled using U.S. Series Bed-Material Samplers.

Suspended, recoverable is the amount of a given constituent that is in solution after the part of a representative water-suspended sediment sample that is retained on a 0.45 um membrane filter has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all the particulate matter is not achieved by the digestion treatment and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Determinations of "suspended, recoverable" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) *dissolved* and (2) *total recoverable* concentrations of the constituent.

Suspended, total is the total amount of a given constituent in the part of a representative water-suspended sediment sample that is retained on a 0.45 µm membrane filter. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to determine when the results should be reported as "suspended, total."

Determinations of "suspended, total" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total concentrations of the constituent.

Taxonomy is the division of biology concerned with the classification and naming of organisms. The classification of organisms is based upon a hierarchical scheme beginning with Kingdom and ending with Species at the base. The higher the classification level, the fewer features the organism have in common. For example, the taxonomy of a particular mayfly, Hexagenia limbata is the following:

Kingdom	Animal
Phylum	Arthropoda
Class	Insecta
Order	Ephemeroptera
Family	Ephemeridae
Genus	Hexageria
Species	Hexagenia limbata

Time-weighted average is computed by multiplying the number of days in the sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the total number of days. A time-weighted average represents the composition of water that would be contained in a vessel or reservoir that had received equal quantities of water from the stream each day for the year.

Thermograph is a thermometer that continuously and automatically records, on a chart, the water temperatures of a stream. "Temperature recorder" is the term used to indicate the location of the thermograph or a digital mechanism that automatically records water temperature on paper tape.

Tons per acre-foot indicates the dry mass of dissolved solids in 1 acre-foot of water. It is computed by multiplying the concentration in milligrams per liter by 0.00136.

Tons per day is the quantity of a substance in solution or suspension that passes a stream section during a 24-hour day.

Total, recoverable is the amount of a given constituent that is in solution after a representative water-suspended sediment sample has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all particulate matter is not achieved by the digestion treatment, and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the dissolved and suspended phases of the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Total is the total amount of a given constituent in a representative water-suspended sediment sample, regardless of the constituent's physical or chemical form. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent present in both the dissolved and suspended phases of the sample. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total" (Note that the word "total" does double duty here, indicating both that the sample consists of a water-suspended sediment mixture and that the analytical method determines all of the constituent in the sample).

> Recoverable from bottom material is the amount of a given constituent that is in solution after a representative sample of bottom material has been digested by a method (usually using an acid or mixture of acids) that results in dissolution of only readily soluble substances. Complete dissolution of all bottom material is not achhieved by the digestion treatment and thus the determination represents less than the total amount (that is, less than 95 percent) of the constituent in the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Total in bottom material the total amount of a given constituent in a representative sample of bottom material. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total in bottom material."

Total load (tons) is the total quantity of any individual constituent, as measured by dry mass or volume, that is being transported in a specific amount of water (discharge) during a given time. It is computed by multiplying the total discharge, times the mg/L of the constituent, times the factor 0.0027, times the number of days.

Unique well number is a hyphenated, 6-digit identification number which is assigned to all New Jersey wells in the Ground Water Site Inventory (GWSI) System. This numbering system was developed in 1978 to simplify identification of wells. The first two digits are a code for the county in which the well is located, and the last four digits are a sequence number. These unique well numbers are being used now in the ground-water level descriptions, wells sampled for water-quality analyses, and on the corresponding location maps in these reports.

Weighted average is used in this report to indicate discharge-weighted average. It is computed by multiplying the discharge for a sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the sum of the discharges. A discharge-weighted average approximates the composition of water that would be found in a reservoir containing all the water passing a given location during the water year after thorough mixing in the reservoir.

WDR is used as an abbreviation for "Water-Data Report" in the summary REVISIONS paragraph to refer to previously published State annual basic-data reports. Prior to 1976, WRD was used, which was the abbreviation for "Water-Resources Data."

WSP is used as an abbreviation for "Water-Supply Paper" in reference to previously published reports.

DOWNSTREAM ORDER AND STATION NUMBER

Since October 1, 1950, the order of listing hydrologic-station records in Survey reports is in a downstream direction along the main stream. All stations on a tributary entering upstream from a main-stream station are listed before that station. A station on a tributary that enters between two main-stream stations is listed between them. A similar order is followed in listing stations on first rank, second rank, and other ranks of triburtaries. The rank of any tributary on which a station is situated with respect to the stream to which it is immediately tributary is indicated by an indention in a list of stations in front of the report. Each indention represents one rank. This downstream order and system of indention show which stations are on tributaries between any two stations and the rank of the tributary on which each station is situated.

As an added means of identification, each hydrologic station and partial-record station has been assigned a station number. These are in the same downstream order used in this report. In assigning station numbers, no distinction is made between partial-record stations and other stations; therefore, the station number for a partial-record station indicates downstream-order position in a list made up of both types of stations. Gaps are left in the series of numbers to allow for new stations that may be established; hence, the numbers are not consecutive. The complete 8-digit number for each station such as 01463500, which appears just to the left of the station name, includes the 2-digit part number "01" plus the 6-digit downstream order number "463500."

NUMBERING SYSTEM FOR WELLS AND MISCELLANEOUS SITES

Miscellaneous downstream order station numbers are not assigned to wells and miscellaneous sites where only random water-quality samples or discharge measurements are taken.

The wells and miscellaneous site numbering system of the U.S. Geological Survey is based on the grid system of latitude and longitude. The system provides the geographic location of the well or miscellaneous site and a unique number for each site. The number consists of 15 digits. The first 6 digits denote the degrees, minutes, and seconds of latitude, the next 7 digits denote degrees, minutes, and seconds of longitude, and the last 2 digits is a sequential number for wells within a 1-second grid. In the event that the latitude-longitude coordinates for a well and a miscellaneous site are the same, they are assigned sequential numbers "01", "02", etc. as one would for wells. See figure 1 below.

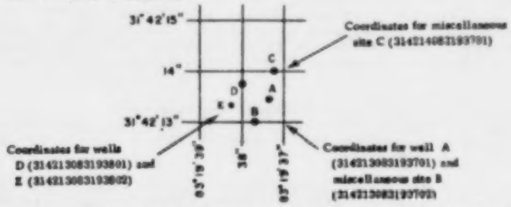
31°42'15"
Coordinates for miscellaneous site C (314214083193701)
C
14"
D
A
E
B
31°42'13"
Coordinates for wells D (314213083193801) and E (314213083193802)
083°19'39"
38"
083°19'37"
Coordinates for well A (314213083193701) and miscellaneous site B (314213083193701)

Figure 1. System for numbering wells and miscellaneous sites (latitude and longitude)

SPECIAL NETWORKS AND PROGRAMS

Some of the stations for which data are published in this report are included in special networks and programs. These stations are identified by their title, set in parentheses, under the station name.

Hydrologic bench-mark station is one that provides hydrologic data for a basin in which the hydrologic regimen will likely be governed solely by natural conditions. Data collected at a bench-mark station may be used to separate effects of natural from manmade changes in other basins which have been developed and in which the physiography, climate, and geology are similar to those in the undeveloped bench-mark basin.

National stream-quality accounting network (NASQAN) is a data collection network designed by the U.S. Geological Survey to meet many of the information demands of agencies or groups involved in national or regional water-quality planning and management. Both accounting and broad-scale monitoring objectives have been incorporated into the network design. Areal configuration of the network is based on river-basin accounting units (identified by 8-digit hydrologic-unit numbers) designated by the Office of Water Data Coordination in consultation with the Water Resources Council. Primary objectives of the network are (1) to depict areal variability of streamflow and water-quality conditions nationwide on a year-by-year basis and (2) to detect and assess long-term changes in streamflow and stream quality.

Pesticide program is a network of regularly sampled water-quality stations where samples are collected to determine the concentration and distribution of pesticides in stream where potential contamination could result from the application of the commonly used insecticides and herbicides. Operation of the network is a Federal interagency activity.

Radiochemical program is a network of regularly sampled water-quality stations where samples are collected to be analyzed for radioisotopes. The streams that are sampled represent major drainage basins in the conterminous United States.

EXPLANATION OF STAGE AND WATER-DISCHARGE RECORDS

Collection and computation of data

The base data collected at gaging stations consist of records of stage and measurements of discharge of streams or canals, and stage, surface area, and contents of lakes or reservoirs. In addition, observations of factors affecting the stage-discharge relation or the stage-capacity relation, weather records, and other information are used to supplement base data in determining the daily flow or volume of water in storage. Records of stage are obtained from either direct readings on a nonrecording gage or from a water-stage recorder that gives either a continuous graph of the fluctuations or a tape punched at selected time intervals. Measurements of discharge are made with a current meter, using the general methods adopted by the Geological Survey. These methods are decribed in standard text-books, in Water-Supply Paper 888, and in U.S. Geological Survey Techniques of Water Resources Investigations, book 3, chapter A6.

For stream-gaging stations, rating tables giving the discharge for any stage are prepared from stage-discharge relation curves. If extensions to the rating curves are necessary to express discharge greater than measured, they are made on the basis of indirect measurements of peak discharge (such as slope-area or contracted-opening measurements, computation of flow over dams or weirs), step-backwater techniques, velocity-area studies, and logarithmic plotting. The daily mean discharge is computed from gage heights and rating tables, then the monthly and yearly mean discharge are computed from the daily figures. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features that form the control, the daily mean discharge is computed by the shifting-control method, in which correction factors based on individual discharge measurements and notes by engineers and observers are used in applying the gage heights to the rating tables. If the stage-discharge relation for a station is temporarily changed by the presence of aquatic growth or debris on the control, the daily mean discharge is computed by what is basically the shifting-control method.

At some stream-gaging stations the stage-discharge relation is affected by backwater from reservoirs, tributary streams, or other sources. This necessitates the use of the slope method in which the slope or fall in a reach of the stream is a factor in determining discharge. The slope or fall is obtained by means of an auxiliary gage set at some distance from the base gage. At some stations the stage-discharge relation is affected by changing stage; at these stations the rate of change in stage is used as a factor in determining discharge.

At some northern stream-gaging stations the stage-discharge relation is affected by ice in the winter, and it becomes impossible to compute the discharge in the usual manner. Discharge for periods of ice effect is computed on the basis of the gage-height record and occasional winter discharge measurements, consideration being given to the available information on temperature and precipitation, notes by gage observers and hydrologists, and comparable records of discharge for other stations in the same or nearby basins.

For a lake or reservoir station, capacity tables giving the contents for any stage are prepared from stage-area relation curves defined by surveys. The application of the stage to the capacity table gives the contents, from which the daily, monthly, or yearly change in contents is computed. Discharge over spillways is computed from a stage-discharge relation curve defined by discharge measurements.

If the stage-capacity curve is subject to changes because of deposition of sediment in the reservoir, periodic resurveys of the reservoir are necessary to define new stage-capacity curves. During the period between reservoir surveys the computed contents may be increasingly in error due to the gradual accumulation of sediment.

For some gaging stations there are periods when no gage-height record is obtained or the recorded gage height is so faulty that it cannot be used to compute daily discharge or contents. This happens when the recorder stops or otherwise fails to operate properly, intakes are plugged, the float is frozen in the well, or for various other reasons. For such periods the daily discharge are estimated on the basis of recorded range in stage, adjoining good record, discharge measurements, weather records, and comparison with other station records from the same or nearby basins. Likewise daily contents may be estimated on the basis of operator's log, prior and subsequent records, inflow-outflow studies, and other information.

The data in this report generally comprise a description of the station and tabulations of daily and monthly figures. For gaging stations on streams or canals a table showing the daily discharge and monthly and yearly discharge is given. For gaging stations on lakes and reservoirs a monthly summary table of stage and contents or a table showing the daily contents is given. Tables of daily mean gage height are included for some streamflow stations and for some reservoir stations. Records are published for the water year, which begins on October 1 and ends on September 30.

The description of the gaging station gives the location, drainage area, period of record, notations of revisions of previously published records, type and history of gages, general remarks, average discharge, and extremes of discharge or contents. The location for the gaging station and the drainage area are obtained from the most accurate maps available. River mileage, given under "LOCATION" for some stations, is that determined and used by the Corps of Engineers or other agencies. Periods for which there are published records for the present stations or for stations generally equivalent to the present one are given under "PERIOD OF RECORD."

Previously published streamflow records of some stations have been found to be in error on the basis of data or information later obtained. Revisions of such records are usually published along with the current records in one of the annual or compilation reports. In order to make it easier to find such revised records, a paragraph headed "REVISED RECORDS" has been added to the description of all stations for which revised records have been published. Listed therein are all the reports in which revisions have been published, each followed by the water years for which figures are revised in that report. In listing the water years only one number is given;

for instance, 1965 stands for the water year October 1, 1964, to September 30, 1965. If no daily, monthly, or annual figures of discharge are affected by the revision, the fact is brought out by notations after the year dates as follows: "(M)" means that only the instantaneous maximum discharge was revised; "(m)" that only the instantaneous minimum was revised; and "(P)" that only peak discharges were revised. If the drainage area has been revised, the report in which the revised figure was first published is given. It should be noted that for all stations for which cubic feet per square mile and runoff in inches are published, a revision of the drainage area necessitates corresponding revision of all figures based on the drainage area. Revised figures of cubic feet per second per square mile and runoff in inches resulting from a revision of the drainage area only are usually not published in the annual series of reports.

The type of gage currently in use; the datum of the present gage referred to National Geodetic Vertical Datum; and a condensed history of the types, locations, and datums of previous gages used during the period of record are given under "GAGE." National Geodetic Vertical Datum is explained in "DEFINITION OF TERMS."

Information pertaining to the accuracy of the discharge records and to conditions which affect the natural flow of the gaging station is given under "REMARKS."

The average discharge for the number of years indicated is given under "AVERAGE DISCHARGE"; it is not given for stations having fewer than 5 complete years of record or for stations where changes in water development during the period of record cause the figure to have little significance. In addition, the median of yearly mean discharges is given for stream-gaging stations having 10 or more complete years of record if the median differs from the average by more than 10 percent. Under "EXTREMES" are given first the extremes for current year, second, the extremes for the period of record, and last information available outside the period of record. Unless otherwise qualified, the maximum discharge (or contents) is the instantaneous maximum corresponding to the crest-stage obtained by use of a water-stage recorder (graphic or digital), a crest-stage gage, or a nonrecording gage read at the time of the crest. If the maximum gage height did not occur on the same day as the maximum discharge (or contents), it is given separately. Similarly, the minimum is the instantaneous minimum unless otherwise qualified. For some stations peak discharges are listed with EXTREMES FOR THE CURRENT YEAR; if they are, all independent peaks, including the maximum for the year, above the selected base with the time of occurrence and corresponding gage heights are published in tabular format. The base discharge, which is given in the table heading, is selected so that an average of about three peaks a year will be presented. Peak discharges are not published for any canals, ditches, drains, or for any stream for which the peaks are subject to substantial control by man. Time of day is expressed in 24-hour local standard time; for example, 12:30 a.m. is 0030, 1:30 p.m. is 1330. The minimums for these stations are published in a separate paragraph following the table of peaks.

Skeleton rating tables are published, immediately following EXTREMES, for stream-gaging stations where they serve a useful purpose and the dates of applicability can be easily identified.

The daily table for stream-gaging stations gives the mean discharge for each day and is followed by monthly and yearly summaries. In the monthly summary below the daily table, the line headed "TOTAL" gives the sum of the daily figures. The lines headed "MAX" and "MIN" give the maximum and minimum daily discharges, respectively, for the month. Discharge for the month also may be expressed in cubic feet per second per square mile (line headed "CFSM"), or in inches (line headed "IN"). Figures for cubic feet per second per square mile and runoff in inches are omitted if there is extensive regulation or diversion, if the drainage area includes large noncontributing areas, or if the average annual rainfall over the drainage basin is usually less than 20 inches. In the yearly summary below the monthly summary, the figures shown are the appropriate daily discharges for the calendar and water years.

Footnotes to the table of daily discharge are introduced by word "NOTE." Footnotes are used to indicate periods for which the discharge is computed or estimated by special methods because of no gage-height record, backwater from various sources, or other unusual conditions. Periods of no gage-height record are indicated if the period is continuous for a month or more or includes the maximum discharge for the year. Periods of backwater from an unusual source, of indefinite stage-relation, or of any other unusual condition at the gage site are indicated only if they are a month or more in length and the accuracy of the records is affected. Days on which the stage-discharge relation is affected by ice are not indicated. The methods used in computing discharge for various unusual conditions have been explained in preceding paragraphs.

For most gaging stations on lakes and reservoirs the data presented comprise a description of the station and a monthly summary table of stage and contents. For some reservoirs a table showing daily contents or stage is given. A skeleton table of capacity at given stages is published for all reservoirs for which records are published on a daily basis, but is not published for reservoirs for which only monthly data are given.

Data collected at partial-record stations follow the information for continuous record sites. Data for partial-record discharge stations are presented in two tables. The first is a table of discharge measurements at low-flow partial-record stations, and the second is a table of annual maximum stage and discharge at crest-stage stations. The tables of partial-record stations are followed by a listing of discharge measurements made at sites other than continuous-record or partial-record stations. Occasionally, a series of discharge measurements are made within a short time period to investigate the seepage gains or losses along a reach of a stream or to determine the low-flow characteristics of an area. Such measurements are also given in special tables following the tables of partial-record stations.

Accuracy of field data and computed results

The accuracy of streamflow data depends primarily on (1) the stability of the stage-discharge relation or, if the control is unstable, the frequency of discharge measurements, and (2) the accuracy of observations of stage, measurements of discharge, and interpretation of records.

The station description under "REMARKS" states the degree of accuracy of the records. "Excellent" means that about 95 percent of the daily discharges are within 5 percent; "good" within 10 percent; and "fair" within 15 percent. "Poor" means that daily discharges have less than "fair" accuracy.

Figures of daily mean discharge in this report are shown to the nearest hundredth of a cubic foot per second for discharges of less than 1 cfs; to tenths between 1.0 and 10 cfs; to whole numbers between 10 and 1,000 cfs; and to 3 significant figures above 1,000 cfs. The number of significant figures used is based solely on the magnitude of the figure. The same rounding rules apply to discharge figures listed for partial-record stations and miscellaneous sites.

Discharge at many stations, as indicated by the monthly mean, may not reflect natural runoff due to the effects of diversion, consumption, regulation by storage, increase or decrease in evaporation due to artificial causes, or to other factors. For such stations, figures of cubic feet per second per square mile and of runoff in inches are not published unless satisfactory adjustments can be made for diversions, for changes in contents of reservoirs, or for other changes incident to use and control. Evaporation from a reservoir is not included in the adjustments for changes in reservoir contents, unless it is so stated. Even at those stations where adjustments are made, large errors in computed runoff may occur if adjustments or losses are large in comparison with the observed discharge.

Publications

Each volume of the 1960 series of U.S. Geological Survey water-supply papers entitled "Surface Water Supply of the United States" contains a listing of the numbers of all water-supply papers in which records of surface-water data were published for the area covered by the individual volumes. Each volume also contains a list of water-supply papers that give detailed information on major floods for the area. A new series of water-supply papers containing surface-water record for the 5-year period October 1, 1965 to September 30, 1970, also will include lists of annual and special reports published as water-supply papers.

Records through September 1950 for the area covered by this report have been compiled and published in Water-Supply Paper 1302; records for October 1950 to September 1960 have been compiled and published in Water-Supply Paper 1722; records for October 1960 to September 1965 have been compiled and published in Water-Supply Paper 1902; records for October 1965 to September 1970 have been compiled and published in Water-Supply Paper 2102. These reports contain summaries of monthly and annual discharge and month-end storage for all previously published records, as well as some records not contained in the annual series of water-supply papers. All records were reexamined and revised where warranted. Estimates of discharge were made to fill short gaps whenever practical. The yearly summary table for each gaging station lists the numbers of the water-supply papers in which daily records were published for that station.

Special reports on major floods or droughts or of other hydrologic studies for the area have been issued in publications other than water-supply papers. Information relative to these reports may be obtained from the district office.

Other data available

Information of a more detailed nature than that published for most of the gaging stations such as observations of water temperatures, discharge measurements, gage-height records, and rating tables is on file in the district office. Also most gaging-station records are available in computer-usable form and many statistical analyses have been made.

Information on the availability of unpublished data or statistical analyses may be obtained from the district office.

Records of stage or discharge collected by agencies other than the Geological Survey

Records of stage or discharge not published by the Geological Survey were collected in New Jersey at 30 sites during the water years October 1960 to current year by the following agencies: records at 4 sites were collected by the North Jersey District Water Supply Commission; at 14 sites by Passaic County, at 1 sites by the National Weather Service; at 3 sites by the National Ocean Survey; at 3 sites by the Corps of Engineers, and 5 sites by Delaware River Joint Toll Bridge Commission. The National Water Data Exchange, Water Resources Division, U.S. Geological Survey, National Center, Reston, VA 22092, maintain an index of such sites. Information on records available at specific sites can be obtained upon request.

EXPLANATION OF WATER-QUALITY RECORDS

Collection and examination of data

Water samples for analyses usually are collected at or near gaging stations. The discharge records at these stations are used in conjunction with the computations of the chemical constituents and sediment loads.

The data in this report include a description of the sampling station and tabulations of the samples analyzed. The description of the sampling station gives the location, drainage area, periods of record for the water-quality data, extremes of the pertinent data, and general remarks. For ground-water sampling stations, no descriptive statements are presented. However, the well number, depth of well, date of sampling, and other pertinent data are given in the table containing the chemical analyses of ground water.

Water-quality information is presented for chemical, biological, and microbiological quality, water temperature, and fluvial sediment. Chemical quality includes the concentrations of individual constituents and certain properties such as hardness, specific conductance, and pH. The biological information includes qualitative and quantitative analyses of plankton, bottom organisms, and particulate inorganic and amorphous matter present. Microbiological information includes quantitative identifications of certain bacteriological indicator organisms. Water-temperature data represent once-daily observations except for stations where a water-quality noncontinuous-digital monitor furnishes hourly temperature readings that provide daily maximum, minimum, and mean temperature data summaries. Fluvial-sediment information is given for suspended-sediment discharges and concentrations and for particle-size distribution of suspended sediment.

Prior to the 1968 water year, data for chemical constituents and concentrations of suspended sediment were reported in parts per million (ppm) and water temperatures were reported in degrees Fahrenheit (°F). In October 1967, the U.S. Geological Survey began reporting data for chemical constituents and concentrations of suspended sediment in milligrams per liter (mg/L) and water temperatures in degrees Celsius (°C). In waters with a density of 1.000 g/ml (grams per milliliter), parts per million and milligrams per liter can be considered equal. In waters with a density greater than 1.000 g/ml, values in parts per million should be multiplied by the density to convert to milligrams per liter. Temperatures reported in degrees Celsius may be converted to degrees Fahrenheit by using Table 1 below.

In October 1968, the Geological Survey began reporting many of the chemical constituents as well as the minor elements in micrograms per liter instead of milligrams per liter. (See "Definitions of Terms," and table for converting Inch-pound Units to International System Units, inside back cover).

Table 1.--Degrees Celsius (°C) to degrees Fahrenheit (°F)* (Temperature reported to nearest 0.5°C)

°C	°F	°C	°F	°C	°F	°C	°F	°C	°F
0.0	32	10.0	50	20.0	68	30.0	86	40.0	104
0.5	33	10.5	51	20.5	69	30.5	87	40.5	105
1.0	34	11.0	52	21.0	70	31.0	88	41.0	106
1.5	35	11.5	53	21.5	71	31.5	89	41.5	107
2.0	36	12.0	54	22.0	72	32.0	90	42.0	108
2.5	36	12.5	54	22.5	72	32.5	90	42.5	108
3.0	37	13.0	55	23.0	73	33.0	91	43.0	109
3.5	38	13.5	56	23.5	74	33.5	92	43.5	110
4.0	39	14.0	57	24.0	75	34.0	93	44.0	111
4.5	40	14.5	58	24.5	76	34.5	94	44.5	112
5.0	41	15.0	59	25.0	77	35.0	95	45.0	113
5.5	42	15.5	60	25.5	78	35.5	96	45.5	114
6.0	43	16.0	61	26.0	79	36.0	97	46.0	115
6.5	44	16.5	62	26.5	80	36.5	98	46.5	116
7.0	45	17.0	63	27.0	81	37.0	99	47.0	117
7.5	45	17.5	63	27.5	81	37.5	99	47.5	117
8.0	46	18.0	64	28.0	82	38.0	100	48.0	118
8.5	47	18.5	65	28.5	83	38.5	101	48.5	119
9.0	48	19.0	66	29.0	84	39.0	102	49.0	120
9.5	49	19.5	67	29.5	85	39.5	103	49.5	121

*°C = 5/9 (°F - 32) or °F = 9/5 (°C) + 32.

Most methods for collecting and analyzing water samples to determine the kinds and concentrations of solutes are described in the U.S. Geological Survey Techniques of Water-Resources Investigations listed at the end of this section. Analysis of pesticides, herbicides, and organic substances in water are described by Goerlitz and Brown. The collection and analysis of aquatic, biological and microbiological samples are described by Greeson and others.

One sample can define adequately the water quality at a given time if the mixture of solutes throughout the stream cross section is homogeneous. However, the concentration of solutes at different locations in the cross section may vary widely with different rates of water discharge, depending on the source of material and the turbulence and mixing of the stream. Some streams must be sampled through many vertical sections to obtain a representative sample needed for an accurate mean concentration and for use in calculating load.

Chemical-quality data published in this report are considered to be the most representative values available for the stations listed. The values reported represent water-quality conditions at the time of sampling as much as possible, consistent with available sampling techniques and methods of analysis.

For chemical-quality stations equipped with noncontinuous-digital monitors, the records consist of daily maximum, minimum, and mean values for each constituent measured and are based upon hourly punches beginning at 0100 hours and ending at 2400 hours for the day of record. More detailed records (hourly values) may be obtained from the U.S. Geological Survey district office (for address see Page IV).

Ground-water normally does not change significantly during short periods of time; infrequent sampling and analysis of ground water adequately defines ground-water quality at a given site. Water samples from wells are collected after prepumping the well and are analyzed individually.

Water temperature

Water temperatures are measured at most of the water-quality stations. In addition, water temperatures are taken at time of discharge measurements for surface-water stations. For daily stations, the water temperatures are taken at about the same time each day. Large streams have a small diurnal temperature change; shallow streams may have a daily range of several degrees and may follow closely the changes in air temperature. Some streams may be affected by waste-heat discharges. Influential factors, field measurement, and data representation of temperature are described by Stevens, Ficke and Smoot.

Sediment

Suspended-sediment concentrations are determined from samples collected by using depth-integrating samplers. Samples usually are obtained at several verticals in the cross-section, or a single sample may be obtained at a fixed point and a coefficient applied to determine the mean concentration in the cross section.

During periods of rapidly changing flow or rapidly changing concentration, samples may have been collected more frequently (twice daily or, in some instances, hourly). The published sediment discharges for days of rapidly changing flow or concentration were computed by the subdivided-day method (time-discharge weighted average). Therefore, for those days when the published sediment discharge value differs from the value computed as the product of discharge times mean concentration times 0.0027, the reader can assume that the sediment discharge for that day was computed by the subdivided-day method. For periods when no samples were collected, daily loads of suspended sediment were estimated on the basis of water discharge, sediment concentrations observed immediately before and after the periods, and suspended-sediment loads for other periods of similar discharge.

At other stations, suspended-sediment samples were collected periodically at many verticals in the stream cross section. Although data collected periodically may represent conditions only at the time of observations, such data are useful in establishing seasonal relations between quality and streamflow in predicting long-term sediment-discharge characteristics of the stream.

In addition to the records of the quantities of suspended sediment, records of the periodic measurements of the particle-size distribution of the suspended sediment are included.

Remark codes for water-quality data

PRINTED OUTPUT	REMARK	PRINTED OUTPUT	REMARK
E	ESTIMATED VALUE	<	ACTUAL VALUE IS KNOWN TO BE LESS THAN THE VALUE SHOWN
>	ACTUAL VALUE IS KNOWN TO BE GREATER THAN THE VALUE SHOWN	ND	MATERIAL SPECIFICALLY ANALYZED FOR BUT NOT DETECTED
K	RESULTS BASED ON COLONY COUNT OUTSIDE THE ACCEPTABLE RANGE (NON-IDEAL COLONY COUNT)		

Publications

Table 2 below, shows the annual series of water-supply papers that give information on quality of surface waters in New Jersey.

Table 2.--Water-supply paper (WSP) numbers, water years, 1945-70

Year	WSP	Year	WSP	Year	WSP
1945	1030	1954	1350	1963	1947
1946	1050	1955	1400	1964	1954
1947	1102	1956	1450	1965	1961
1948	1132	1957	1520	1966	1991
1949	1162	1958	1571	1967	2011
1950	1186	1959	1641	1968	2091
1951	1197	1960	1741	1969	2141
1952	1250	1961	1881	1970	2151
1953	1290	1962	1941		

Water-quality criteria

The Federal Water Pollution Control Act Amendments of 1972 (P.L. 92-500) stipulated that water-quality criteria were to be developed to assure the integrity of ground and surface waters of the United States. Criteria were set for various types of water use.

These criteria indicate limiting values of various parameters in water to provide adequate protection of water users, essential aquatic life, and consumers of such aquatic life.

Chemical constituents in bottom sediments (BTM) are reported as weight of constituent per weight of sediment. These limiting values are based not on health effects, but rather on the potential hazard which might be caused if these sediments were suspended into the water phase.

WATER QUALITY CRITERIA

Parameter name	Limiting value	Units	Use	Basis for selection
	General Inorganics			
Alkalinity, Total (as CACO$_3$)	20*	mg/L	2	A
Antimony	50	µg/L	5	C
Antimony, BTM	500	µg/g	5	C
Arsenic	50	µg/L	4,6	A,B,C
	100	µg/L	3	A
Arsenic, BTM	200	µg/g	5	C
Barium	1000	µg/L	4,6	A,B,C
Barium, BTM	2000	µg/g	5	C

WATER QUALITY CRITERIA

Parameter name	Limiting value	Units	Use	Basis for selection
		General Inorganics--Continued		
Beryllium	11	µg/L	2a	A,C
	100	µg/L	3	A
	1100	µg/L	2b	A
Beryllium, BTM	200	µg/g	5	C
Boron	750	µg/L	3	A
	1000	µg/L	5	C
Cadmium	0.4	µg/L	1a	A
	1.2	µg/L	1b	A
	4.0	µg/L	2a	A
	5.0	µg/L	8	A
	10	µg/L	4,6	A,B,C
	12	µg/L	2B	A
Cadmium, BTM	20	µg/g	5	C
Chloride	250	mg/L	6A	D
Chromium, total	50	µg/L	4,6	A,B,C
	100	µg/L	2	A
Chromium, BTM	200	µg/g	5	C
Color	15	color units	6a	D
	75	color units	4	A
Copper	1000	µg/L	4,6a	A,C,D
Copper, BTM	2000	µg/g	5	C
Cyanide	5	µg/L	2,8	A
	20	µg/L	5	C
Cyanide, BTM	100	µg/g	5	C
Fecal coliform, MF	200†	col/100 mL	7	A
Fecal coliform, MPN	200†	col/100 mL	7	A
Iron	300	µg/L	4,6a	A,D
	1000	µg/L	2	A
Lead, dissolved	50	µg/L	4,6	A,B,C
Lead, total	200	µg/L	5	C
Lead, BTM	500	µg/g	5	C
Manganese	50	µg/L	4,6a	A,D
Mercury	0.05	µg/L	2	A
	0.1	µg/L	8	A
	2	µg/L	4,6	A,B,C
Mercury, BTM	20	µg/g	5	C
Nickel	100	µg/L	2,8	A,C
Nickel, BTM	2000	µg/g	5	C
Nitrate (as N)	10	mg/L	4,6	A,B,C
Nitrite (as N)	1	mg/L	4	A,C
Oxygen, dissolved	5*	mg/L	2	A
pH	6.5-8.5		6a,8	A,C,D
	6.5-9.0		2	A
	5.0-9.0		4	A
Selenium	10	µg/L	4,6	A,B,C
Selenium, BTM	20	µg/g	5	C
Silver	50	µg/L	4,6	A,B,C
Silver, BTM	1000	µg/g	5	C
Solids, total dissolved	500	mg/L	6a	D
Sulfate	250	mg/L	6a	D
Zinc	5000	µg/L	4,6a	A,C,D
Zinc, BTM	5000	µg/g	5	C
		Organics		
Aldrin-dieldrin	0.003	mg/L	2	A
Aldrin	0.01	mg/L	9	C
Aldrin, BTM	20	µg/kg	5	C
Chlordane	0.004	µg/L	8	A
	0.01	µg/L	2	A,C
Chlordane, BTM	20	µg/kg	5	C
DDT**	0.001	µg/L	2,8	A
	0.01	µg/L	9	C
DDT, BTM	20	µg/kg	5	C
Demeton	0.1	µg/L	2,8	A
Dieldrin	0.01	µg/L	9	C
Dieldrin, BTM	20	µg/kg	5	C
Endosulfan	0.001	µg/L	8	A
	0.003	µg/L	2	A
	0.01	µg/L	9	C
Endrin	0.004	µg/L	2,8	A
	0.01	µg/L	9	C
	0.2	µg/L	4,6	B
Endrin, BTM	20	µg/kg	5	C
Guthion	0.01	µg/L	2,8	A
Heptachlor	0.001	µg/L	2,8	A
	0.01	µg/L	9	C
Heptachlor, BTM	20	µg/kg	5	C
Heptachlor epoxide	0.01	µg/L	9	C

WATER QUALITY CRITERIA

Parameter name	Limiting value	Units	Use	Basis for selection
		Organics--Continued		
Heptachlor epoxide, BTM	20	µg/kg	5	C
Lindane	0.004	µg/L	8	A
	0.01	µg/L	2	A,C
	4	µg/L	4,6	A,B
Lindane, BTM	20	µg/kg	5	C
Malathion	0.1	µg/L	2,8	A,C
Malathion, BTM	20	µg/kg	5	C
MBAS (foaming agents)	0.5	mg/L	6a	D
Methoxychlor	0.03	µg/L	2,8	A,C
	100	µg/L	4,6	A,B
Methoxychlor, BTM	20	µg/kg	5	C
Mirex	0.001	µg/L	2,8	A
	.01	µg/L	9	C
Mirex, BTM	20	µg/kg	5	C
Parathion	0.04	µg/L	2,8	A,C
Parathion, BTM	20	µg/kg	5	C
PCB	0.001	µg/L	2,8	A
	0.1	µg/L	9	C
PCB, BTM	20	µg/kg	5	C
Phenols	1.0	µg/L	4	A
	5.0	µg/L	5	C
Toxaphene	0.005	µg/L	2,8	A
	1.0	µg/L	9	C
	5.0	µg/L	4,6	A,B
Toxaphene, BTM	20	µg/kg	5	C
Silvex	10	µg/L	4,6	A,B,C
Silvex, BTM	20	µg/kg		C
2, 4-D	100	µg/L	4,6	A,B,C
2, 4-D, BTM	20	µg/kg	5	C
		Radiochemicals		
Radium 226	5	pCi/L	4,6	B,C
Stronticum 90	8	pCi/L	4,6	B,C
Tritium	20,000	pCi/L	4,6	B,C
Gross alpha	15	pCi/L	4,6	B,C

* Minimum recommended value
† Log mean, based on not less than five samples
** Including metabolites (DDD and DDE)

Water Use and/or for the Protection of:

1a. Sensitive salmonoid species in soft water
1b. Sensitive salmonoid species in hard water
2. Freshwater aquatic life
2a. Freshwater aquatic life in soft water
2b. Freshwater aquatic life in hard water
3. Crop irrigation
4. Domestic water supply source
5. Recommended limits have not been established; limit set to arbitrarily flag no more than the upper 15 to 20 percent of values nationwide.
6. Potable drinking water, based on health effects
6a. Potable drinking water, based on aesthetic considerations
7. Primary contact
8. Marine aquatic life
9. Minimum non-zero concentration reported by the U.S. Geological Survey Central Water Quality Laboratories system.

Basis for Selection

A. Maximum levels recommended by: Quality Criteria for Water, 1976, U.S. Environmental Protection Agency.
B. Maximum contaminant level established by: National Interim Primary Drinking Water Regulations 1976, U.S. Environmental Protection Agency.
C. Suggested limiting value, U.S. Geological Survey, Quality of Water Branch.
D. Maximum contaminant level recommended for the Proposed Secondary Drinking Water Regulations, U.S. Environmental Protection Agency.

EXPLANATION OF GROUND-WATER LEVEL RECORDS

Collection of the data

Only ground-water level data from a basic network of observation wells are published herein. This basic network contains observation wells so located that the most significant data are obtained from the fewest wells in the most important aquifers.

Each well is identified by means of (1) a 15-digit number that is based on latitude and longitude (see figure 1) and (2) a local name and a unique well number that are provided for local needs.

Water-level measurements in this report are given in feet with reference to land-surface datum (LSD, lsd). Land-surface datum is a datum plane that is approximately at land surface at each well. The altitude of the land-surface datum above NGVD 1929, and the height of the measuring point (MP) above or below land-surface datum is given in each well description.

Measurements are made in many types of wells, under varying conditions of access and at different temperatures, hence, neither the method of measurement nor the equipment can be standardized. At each observation well, however, the equipment and techniques used are those that will ensure that measurements at each well are consistent.

Water-level data in these reports were obtained from water-level recorders, water-level extremes recorders, and from periodic manual measurements. The equipment used at each well is described in the well description under the listing "Instrumentation." Water levels in wells equipped with water-level recorders are reported for every fifth day and the end of each month (eom). Beginning in the 1977 water year, water-level recorders were removed from some wells and replaced by water-level extremes recorders. The extremes are read from these recorders at about three month intervals, but the actual dates of occurrance of the extremes (highest and lowest water levels) are unknown. In these reports the extreme water levels are given along with the interim dates in the well descriptions, and the manuel only measurements are tabulated below the well descriptions.

Water levels are reported to as many significant figures as can be justified by the local conditions. For example, in a measurement of a depth to water of several hundred feet, the error in determining the absolute value of the total depth to water may be a few tenths of a foot, wheareas the error in determining the net change of water level between successive measurements may be only a hundredth of a few hundredths of a foot. For lesser depths to water the accuracy is greater. Accordingly, most measurements are reported to a hundredth of a foot, but some are given only to a tenth of a foot or a larger unit.

Publications

Table 3 below, shows the series of water-supply papers that give ground-water level data for New Jersey, 1935 to 1974. No water-level data were published in 1975. Beginning in 1976, ground-water level data for New Jersey have been published in these annual water data reports.

Table 3.--Water-supply paper (WSP) numbers, water years, 1935-74

Year	WSP	Year	WSP	Year	WSP
1935	777	1944	1016	1953	1265
1936	817	1945	1023	1954	1321
1937	840	1946	1071	1955	1404
1938	845	1947	1096	1956-57	1537
1939	866	1948	1126	1958-62	1782
1940	906	1949	1156	1963-67	1977
1941	936	1950	1165	1968-72	2140
1942	986	1951	1191	1973-74	2164
1943	986	1952	1221		

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Thirty-four manuals by the U.S. Geological Survey have been published to date in the series on techniques [illegible] Book 3 (Applications of Hydraulics) is on surface water. [illegible] limited to a narrow field of subject matter. This format permits flexibility in revision and publication as the need arises. The reports listed below are for sale by the U.S. Geological Survey, Branch of Distribution, 1200 South Eads Street, Arlington, VA 22202 (authorized agent of the Superintendent of Documents, Government Printing Office).

NOTE: When ordering any of these publications, please give the title, book number, chapter number, and "U.S. Geological Survey Techniques of Water-Resources Investigations".

1-D1. *Water temperature--influential factors, field measurement, and data presentation*, by H. H. Stevens, Jr., J. F. Ficke, and G. F. Smoot: USGS--TWRI Book 1, Chapter D1. 1975. 65 pages.

1-D2. *Guidelines for collection and field analysis of ground-water samples for selected unstable constituents*, by W. W. Wood: USGS--TWRI Book 1, Chapter D2. 1976. 24 pages.

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3-A2. *Measurement of peak discharge by the slope-area method*, by Tate Dalrymple and M. A. Benson: USGS--TWRI Book 3, Chapter A2. 1967. 12 pages.

3-A3. *Measurement of peak discharge at culverts by indirect methods*, by G. L. Bodhaine: USGS--TWRI Book 3, Chapter A3. 1968. 60 pages.

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3-A5. *Measurement of peak discharge at dams by indirect methods*, by Harry Hulsing: USGS--TWRI Book 3, Chapter A5. 1967. 29 pages.

3-A6. *General procedure for gaging streams*, by R. W. Carter and Jacob Davidian: USGS--TWRI Book 3, Chapter A6. 1968. 13 pages.

3-A7. *Stage measurements at gaging stations*, by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A7. 1968. 28 pages.

3-A8. *Discharge measurements at gaging stations*, by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A8. 1969. 65 pages.

3-A11. *Measurement of discharge by moving-boat method*, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 3, Chapter A11. 1969. 22 pages.

3-B1. *Aquifer-test design, observation, and data analysis*, by R. W. Stallman: USGS--TWRI Book 3, Chapter B1. 1971. 26 pages.

3-B2. *Introduction to ground-water hydraulics, a programmed text for self-instruction*, by G. D. Bennett: USGS--TWRI Book 3, Chapter B2. 1976. 172 pages.

3-C1. *Fluvial sediment concepts*, by H. P. Guy: USGS--TWRI Book 3, Chapter C1. 1970. 55 pages.

3-C2. *Field methods for measurement of fluvial sediment*, by H. P. Guy and V. W. Norman: USGS--TWRI Book 3, Chapter C2. 1970. 59 pages.

3-C3. *Computation of fluvial-sediment discharge*, by George Porterfield: USGS--TWRI Book 3, Chapter C3. 1972. 66 pages.

4-A1. *Some statistical tools in hydrology*, by H. C. Riggs: USGS--TWRI Book 4, Chapter A1. 1968. 39 pages.

4-A2. *Frequency curves*, by H. C. Riggs: USGS--TWRI Book 4, Chapter A2. 1968. 15 pages.

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5-A4. *Methods for collection and analysis of aquatic biological and microbiological samples*, edited by P. E. Greeson, T. A. Ehlke, G. A. Irwin, B. W. Lium, and K. V. Slack: USGS--TWRI Book 5, Chapter A4. 1977. 332 pages.

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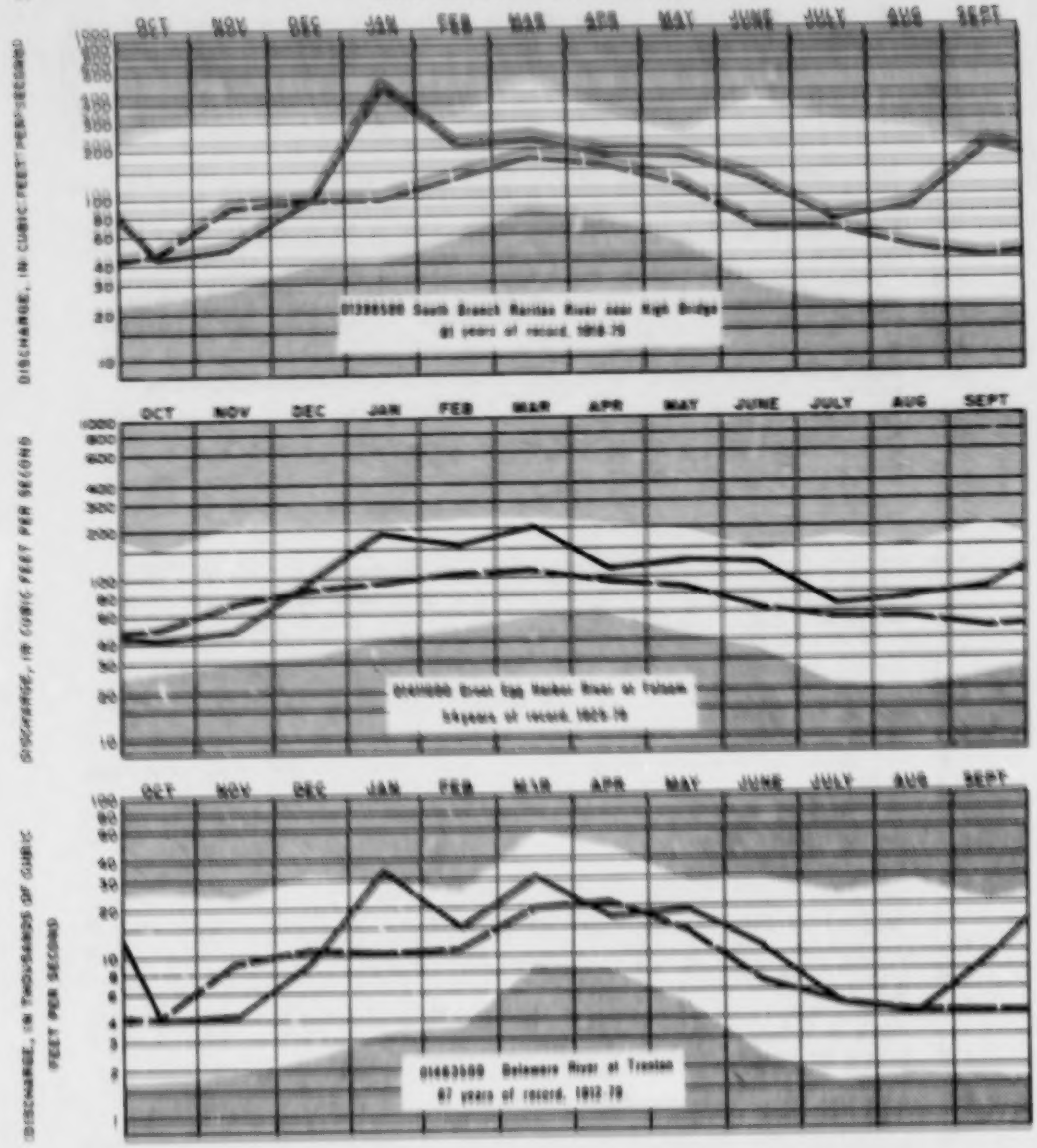


Unshaded area: indicates range between highest and lowest mean recorded for the month prior to 1979 water year

Dashed line: indicates normal (median) of the monthly means for the standard reference period 1941-70

Solid line: indicates observed monthly mean flow for the 1979 water year

FIGURE 2.--MONTHLY STREAMFLOW AT KEY GAGING STATIONS

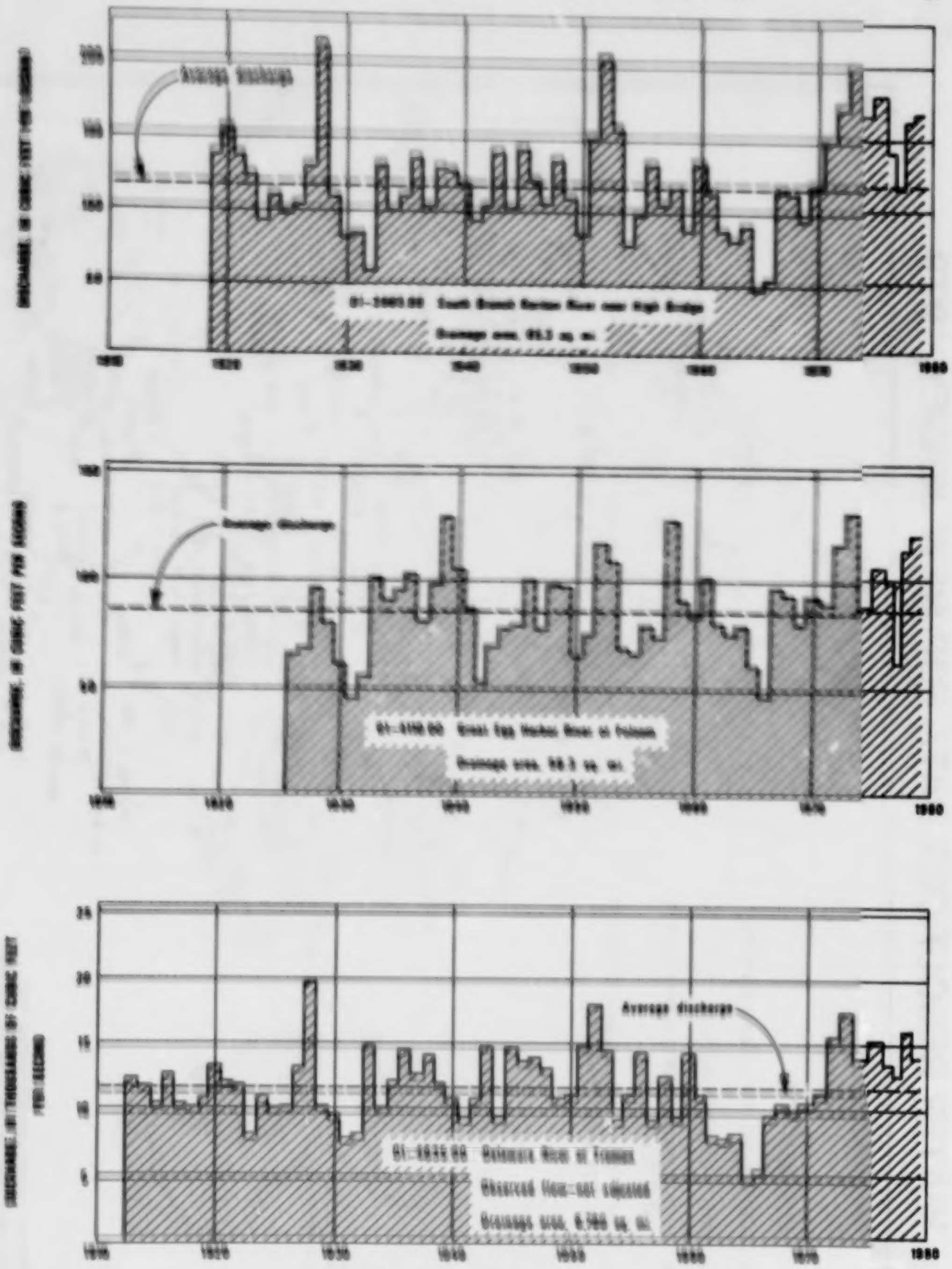
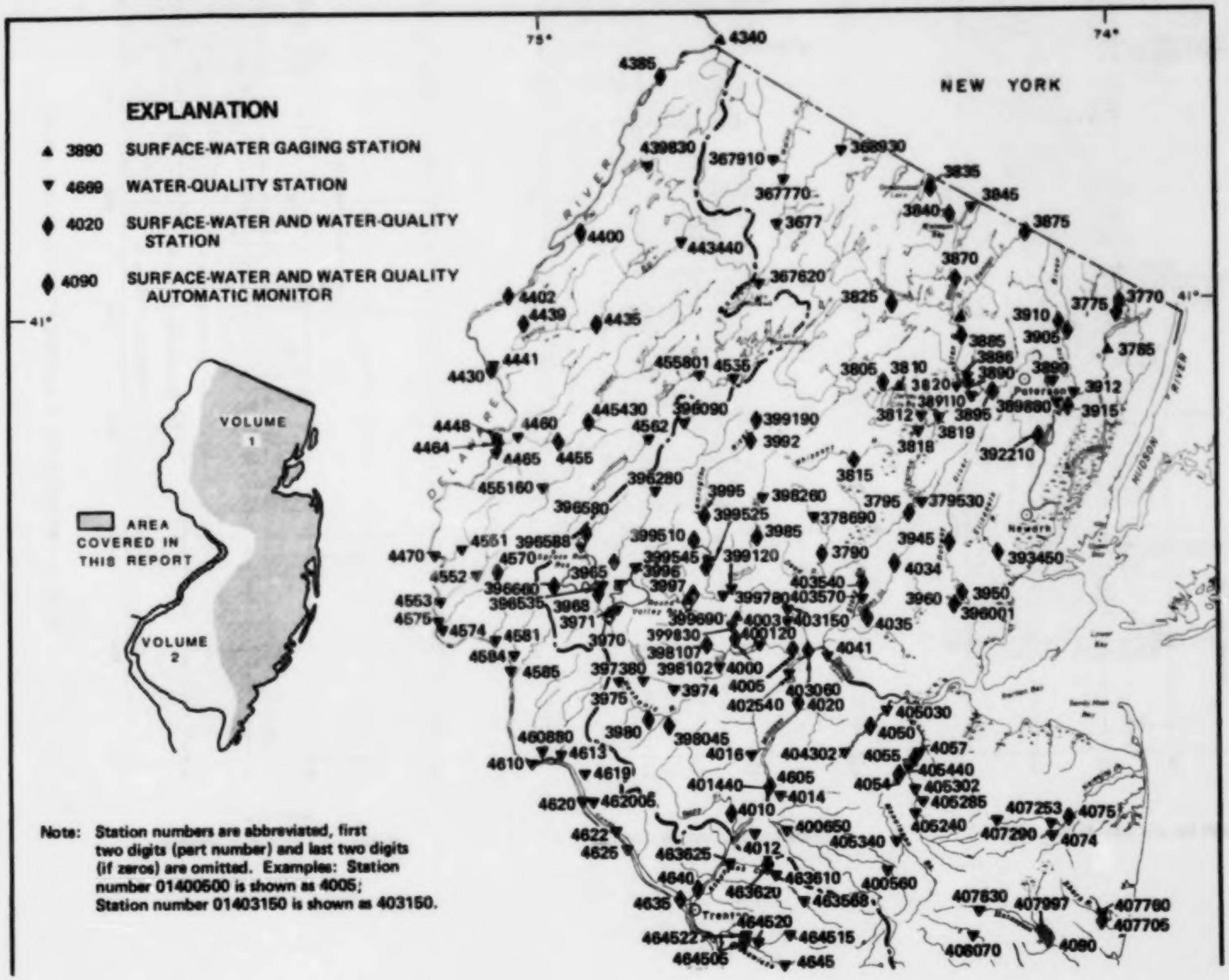
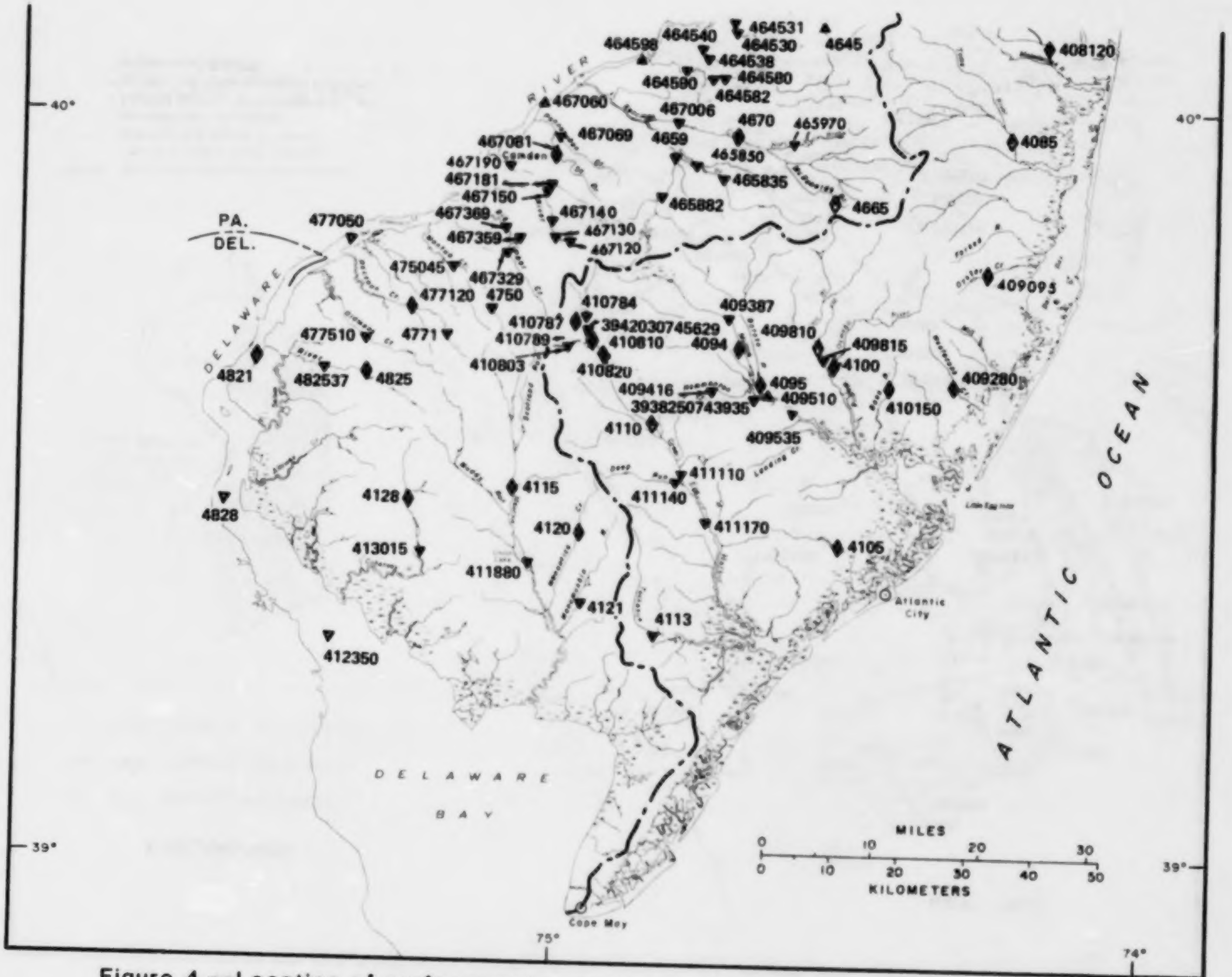


FIGURE 3.-- ANNUAL MEAN DISCHARGE AT KEY GAGING STATIONS

WATER RESOURCES DATA FOR NEW JERSEY, 1979


EXPLANATION
▲ 3890 SURFACE-WATER GAGING STATION
▼ 4669 WATER-QUALITY STATION
◆ 4020 SURFACE-WATER AND WATER-QUALITY STATION
◆ 4090 SURFACE-WATER AND WATER QUALITY AUTOMATIC MONITOR
AREA COVERED IN THIS REPORT
VOLUME 1
VOLUME 2
NEW YORK
75°
74°
41°
DELAWARE RIVER
HUDSON RIVER
Paterson
Newark
Trenton
4340
4385
439830
367910
368930
367770
3677
3835
3845
3840
3875
4400
443440
367620
3870
3825
4402
4439
4435
3775
3770
3910
3905
3785
4441
4430
455801
4536
3885
3886
3890
3805
3810
3820
389110
3895
3812
3819
3818
389680
3890
3912
3915
445430
396090
399190
3992
4448
4460
4562
4464
4465
4455
392210
3815
396280
455160
3995
398260
396580
399525
378690
3795
379530
399510
3985
3945
4551
396588
4570
399545
399120
3790
393450
4470
4552
3965
3996
3997
4034
403540
396660
396535
3968
399780
403570
3960
3950
396001
4553
4575
3971
399690
4003
403150
4035
4574
4581
399830
400120
3970
398107
4041
4584
4585
397380
398102
4000
4005
403060
3975
3974
402540
4020
405030
3980
4050
460880
398045
4613
4016
404302
4057
4610
4055
405440
4619
401440
4605
4054
405302
4620
462005
4014
405285
4010
407253
4075
405240
407290
4074
4622
400650
4625
463625
4012
405340
4640
463610
400560
463620
463568
407830
407997
407760
4635
407705
464520
464522
464515
406070
4090
464505
4645

Note: Station numbers are abbreviated, first two digits (part number) and last two digits (if zeros) are omitted. Examples: Station number 01400500 is shown as 4005; Station number 01403150 is shown as 403150.



40°
39°
75°
74°
ATLANTIC OCEAN
DELAWARE BAY
DELAWARE
RIVER
PA.
DEL.
Camden
Atlantic City
Cape May
MILES
0 10 20 30
0 10 20 30 40 50
KILOMETERS
408120
4085
409095
409280
410150
4105
464531
464530
464540
464538
464598
4645
464590
464580
464582
467060
467006
4670
465970
467081
467069
4659
465850
465835
467190
467181
467150
465882
4665
467369
467140
467130
467359
467120
477050
475045
467329
477120
4750
410784
409387
410787
3942030745629
409810
409815
410789
410810
4094
4100
410803
410820
477510
4771
4095
409416
409510
3938250743935
4821
482537
4825
409535
4110
411110
4115
411140
4128
4828
4120
411170
413015
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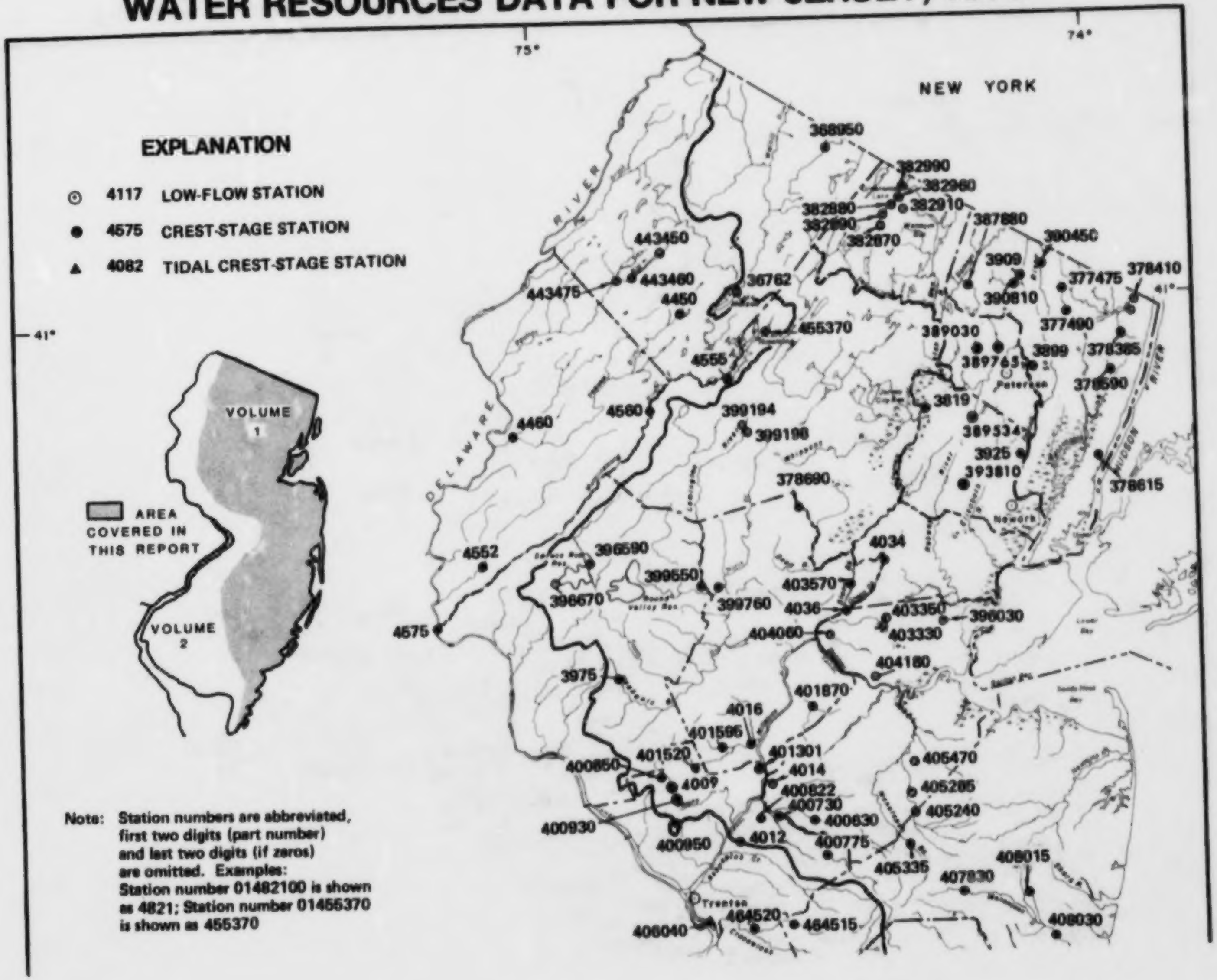
4121
4113
412350

Figure 4.--Location of surface-water gaging stations and water-quality stations.

WATER RESOURCES DATA FOR NEW JERSEY, 1979


75°
74°
41°
41°
NEW YORK
EXPLANATION
4117 LOW-FLOW STATION
4575 CREST-STAGE STATION
4082 TIDAL CREST-STAGE STATION
AREA COVERED IN THIS REPORT
VOLUME 1
VOLUME 2
DELAWARE RIVER
HUDSON RIVER
Paterson
Newark
Trenton
368950
382990
382960
382880
382910
382890
382870
387880
390450
3909
390810
377475
378410
377490
378385
378590
378615
36762
455370
389030
389765
3899
3819
389534
3925
393810
443450
443460
443475
4450
4555
4560
4460
399194
399198
378690
4034
4552
396590
396670
399650
399760
403570
4036
403350
403330
396030
404060
404180
4575
3975
401870
4016
401595
401520
401301
400850
4014
4009
400822
400730
400830
400930
400950
4012
400775
405470
405285
405240
405335
407830
408015
408030
406040
464520
464515

Note: Station numbers are abbreviated, first two digits (part number) and last two digits (if zeros) are omitted. Examples: Station number 01482100 is shown as 4821; Station number 01455370 is shown as 455370

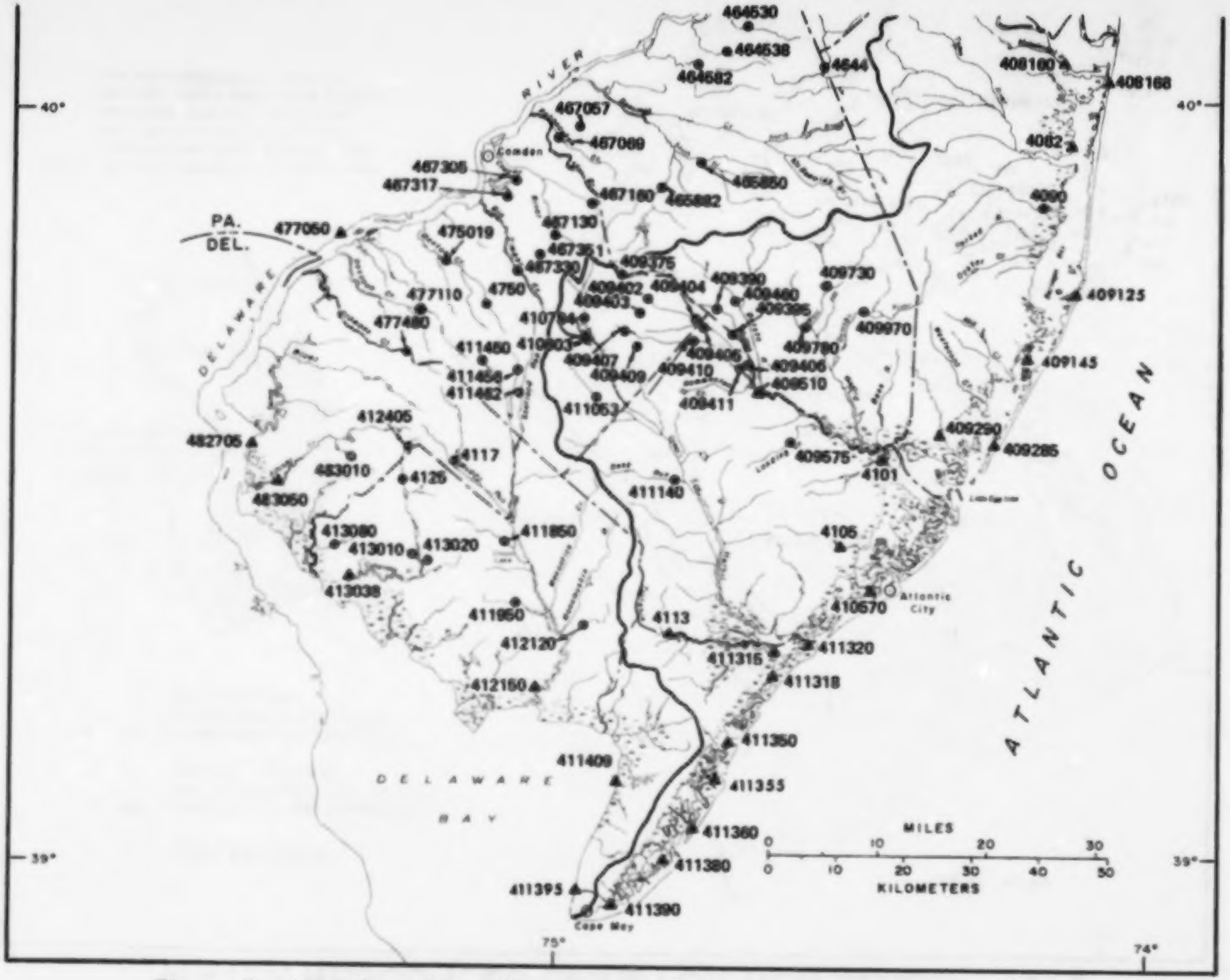
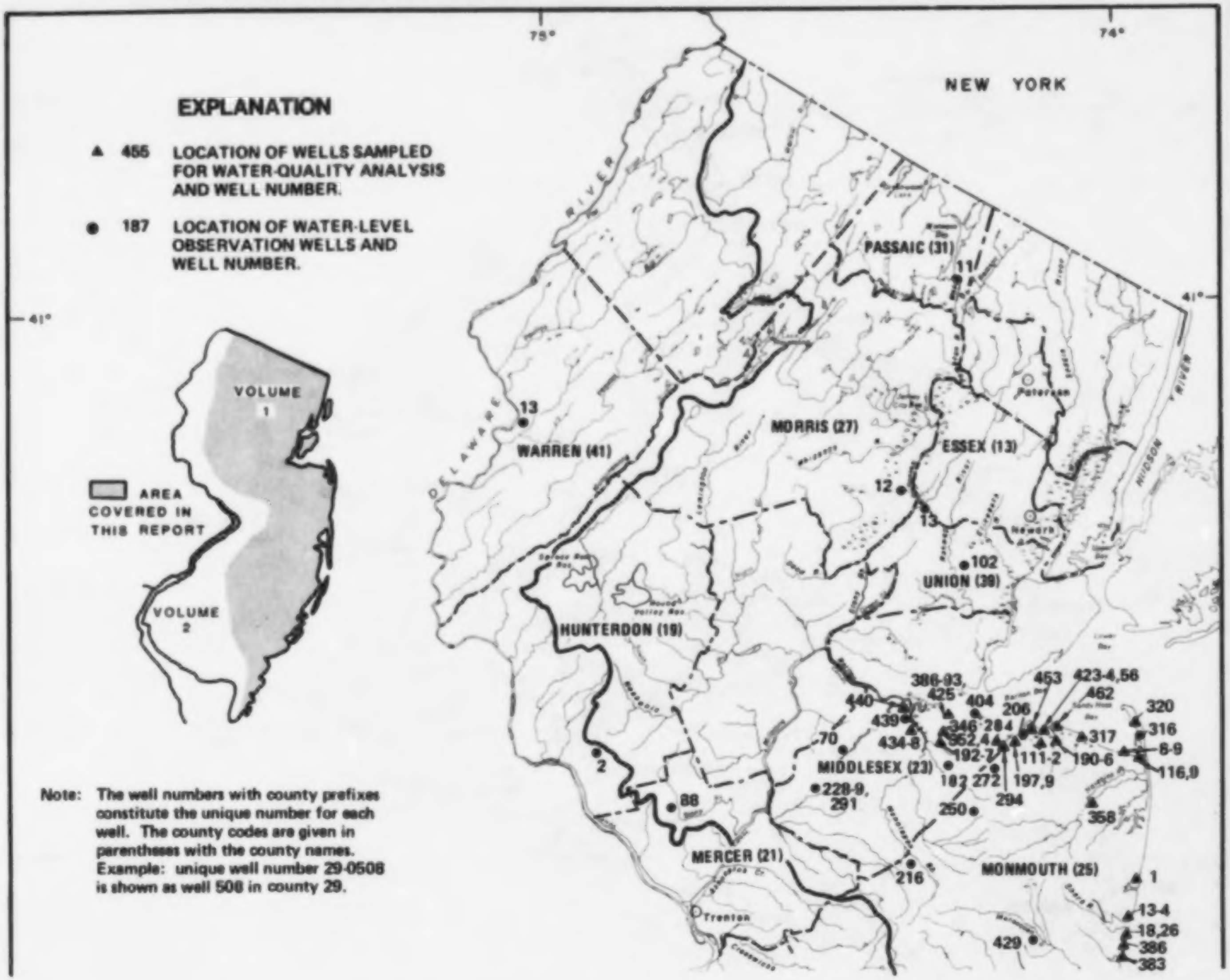

40°
40°
39°
39°
75°
74°
RIVER
DELAWARE
PA.
DEL.
Camden
Atlantic City
Cape May
ATLANTIC OCEAN
DELAWARE BAY
MILES
0 10 20 30
0 10 20 30 40 50
KILOMETERS
464530
464538
464582
4644
408160
408168
467057
467069
4082
467305
467317
467160
465882
465850
4090
477050
475019
467130
467351
467330
409375
409402
409403
409404
409390
409460
409395
409730
409970
409125
477110
4750
477480
410784
410803
409407
409409
409406
409410
409411
409780
409405
409510
409145
411450
411456
411462
411053
412405
482705
483010
4125
4117
409575
4101
409290
409285
411140
483050
413080
413010
413020
413038
411850
4105
410570
411950
412120
4113
411315
411320
411318
412150
411350
411409
411355
411360
411380
411395
411390

Figure 5.--Location of low-flow and crest-stage partial-record stations.

WATER RESOURCES DATA FOR NEW JERSEY, 1979


75°
74°
41°
41°
NEW YORK
EXPLANATION
▲ 455 LOCATION OF WELLS SAMPLED FOR WATER-QUALITY ANALYSIS AND WELL NUMBER.
● 187 LOCATION OF WATER-LEVEL OBSERVATION WELLS AND WELL NUMBER.
VOLUME 1
VOLUME 2
AREA COVERED IN THIS REPORT
DELAWARE RIVER
HUDSON RIVER
PASSAIC (31)
MORRIS (27)
ESSEX (13)
WARREN (41)
UNION (39)
HUNTERDON (19)
MIDDLESEX (23)
MERCER (21)
MONMOUTH (25)
Paterson
Newark
Trenton
11
13
12
13
102
2
88
70
440
439
434-8
386-93, 425
404
346
284
352,4
192-7
183
272
294
206
453
423-4,56
462
111-2
197,9
190-6
317
320
316
8-9
116,9
358
228-9, 291
250
216
1
13-4
18,26
386
383
429

Note: The well numbers with county prefixes constitute the unique number for each well. The county codes are given in parentheses with the county names. Example: unique well number 29-0508 is shown as well 508 in county 29.

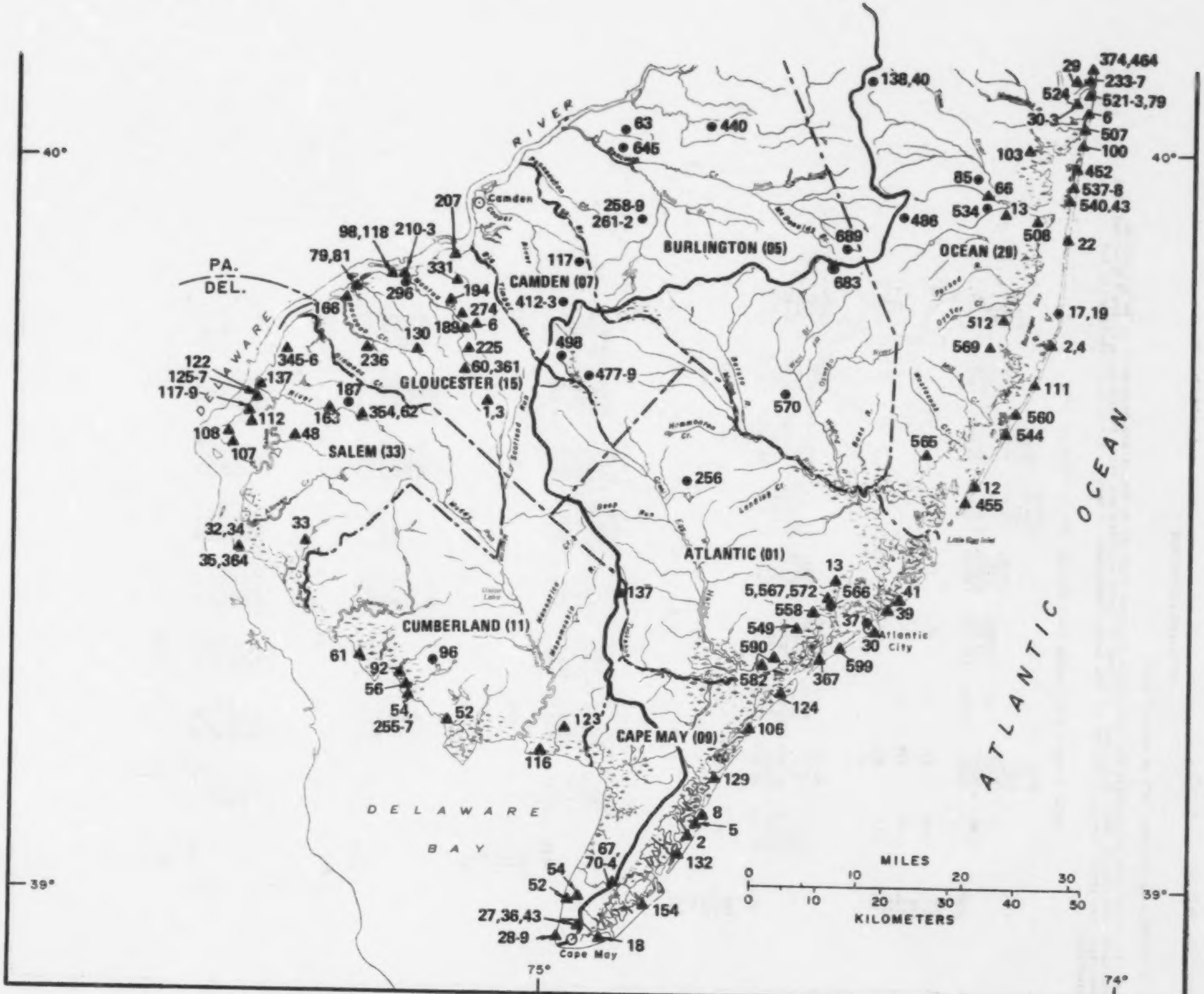

PA.
DEL.
DELAWARE
RIVER
Camden
BURLINGTON (05)
CAMDEN (07)
GLOUCESTER (15)
SALEM (33)
CUMBERLAND (11)
ATLANTIC (01)
CAPE MAY (09)
OCEAN (29)
ATLANTIC OCEAN
DELAWARE BAY
Atlantic City
Cape May
Little Egg Inlet
40°
39°
75°
74°
MILES
0 10 20 30
0 10 20 30 40 50
KILOMETERS
138,40
63
646
440
258-9
261-2
117
412-3
689
683
486
85
66
534
13
103
29
374,464
233-7
524
521-3,79
30-3
6
507
100
452
537-8
540,43
508
22
17,19
512
569
2,4
111
560
544
565
12
455
570
256
498
477-9
207
98,118
210-3
79,81
296
331
194
274
189
6
225
60,361
130
236
166
345-6
122
125-7
117-9
137
187
163
354,62
112
108
107
48
1,3
32,34
35,364
33
137
13
5,567,572
566
41
558
39
549
37
590
30
599
582
367
124
106
129
8
5
2
132
154
67,
70-4
54
52
27,36,43
28-9
18
123
116
61
92
96
56
54,
255-7
52

Figure 6.--Map showing location of ground-water quality stations and observation wells.

01367620 WALLKILL RIVER AT OUTFLOW OF LAKE MOHAWK AT SPARTA, NJ

LOCATION.--Lat 41°01'59", long 74°37'36", Sussex County, Hydrologic Unit 02020007, at bridge in Sparta, 200 ft (61 m) downstream from outflow of Lake Mohawk, and 1.2 mi (1.9 km) southwest of Sparta Station.

DRAINAGE AREA.--4.38 mi^2 (11.34 km^2).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)
FEB 21...	1110	410	8.1	2.0	13.9	3.0	20	2	120
APR 18...	1045	376	8.7	10.0	11.2	5.0	<20	<2	--
MAY 17...	1015	385	7.2	18.0	4.2	3.0	130	33	130

DATE	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
FEB 21...	28	13	27	1.2	96	--	11	53	.1
APR 18...	--	--	--	--	--	--	--	--	--
MAY 17...	31	13	31	1.3	98	.0	9.5	53	.1

DATE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	PHOSPHATE, TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
FEB 21...	.2	218	--	--	--	2.0	.03	4.3
APR 18...	--	--	<1.0	<.10	--	1.1	.11	--
MAY 17...	.1	231	<1.0	.30	4.6	4.9	.16	4.6

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
MAY 17...	1015	10	29	0	40	0	20	7

DATE	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	PHENOLS (UG/L)
MAY 17...	250	6	230	<.5	9	0	20	0

01367700 WALLKILL RIVER AT FRANKLIN, NJ

LOCATION.--Lat 41°06'43", long 74°35'21", Sussex County, Hydrologic Unit 02020007, at bridge 120 ft (37 m) downstream from dam at outlet of Franklin Pond in Franklin, and 0.8 mi (1.3 km) upstream from Wildcat Brook.

DRAINAGE AREA.--29.4 mi^2 (76.1 km^2).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1959-63, 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)
FEB 21...	1230	419	8.0	2.0	10.6	2.0	490	240	120
APR 18...	1150	273	8.4	10.0	11.1	2.0	230	22	89
MAY 17...	1200	320	7.4	17.0	6.8	1.0	330	11	120

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
FEB 21...	29	12	23	1.3	91	17	44	.1	6.1
APR 18...	22	8.3	18	.9	63	15	32	.1	3.8
MAY 17...	29	11	21	1.3	87	13	38	.1	5.5

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHATE, TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
FEB 21...	209	.50	.20	.20	.40	.90	.01	3.6
APR 18...	156	<1.0	<.10	--	.80	--	.05	--
MAY 17...	212	<1.0	.20	.50	.70	--	.04	13

HUDSON RIVER BASIN

01367770 WALLKILL RIVER NEAR SUSSEX, NJ

LOCATION.--Lat 41°11'38", long 74°34'32", Sussex County, Hydrologic Unit 02020007, at bridge on Glenwood Road, 0.8 mi (1.3 km) upstream of Papakating Creek, 1.7 mi (2.7 km) southwest of Independence Corner, 2.0 mi (3.2 km) southeast of Sussex, and 2.1 mi (3.4 km) northwest of McAfee.

DRAINAGE AREA.--60.8 mi² (157.5 km²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)
JAN 31...	1315	234	342	8.0	1.0	12.2	3.0	3480	17
APR 18...	1300	185	328	8.5	11.0	11.0	1.0	20	2
MAY 17...	1300	59	418	7.6	16.0	7.6	1.0	270	79
AUG 27...	1345	33	435	8.0	23.5	6.8	--	700	540

DATE	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
JAN 31...	110	27	11	14	1.2	84	19	28	.1
APR 18...	130	30	13	14	1.0	100	18	27	.1
MAY 17...	180	43	18	17	1.4	150	18	31	.1
AUG 27...	210	49	22	20	2.0	180	20	37	.1

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHATE, TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
JAN 31...	6.8	160	<1.0	<.10	--	.66	--	.07	3.2
APR 18...	3.2	186	<1.0	<.10	--	.50	--	.02	--
MAY 17...	7.3	268	<1.0	.20	.70	.90	--	.10	5.3
AUG 27...	7.6	260	1.2	<.10	--	.30	1.5	.10	8.8

01367910 PAPAKATING CREEK AT SUSSEX, NJ

LOCATION.--Lat 41°12'02", long 74°35'59", Sussex County, Hydrologic Unit 02020007, at bridge on State Route 23 in Sussex, 0.7 mi (1.1 km) downstream from Clove Brook, 2.6 mi (4.2 km) southwest of Independence Corner, and 3.4 mi (5.6 km) northwest of McAfee.

DRAINAGE AREA.--59.4 mi^2 (153.8 km^2).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)
JAN 31...	1200	192	202	7.4	1.0	11.4	3.0	>24000	920
APR 25...	1030	88	209	7.7	15.0	9.1	1.0	80	79
MAY 31...	0700	254	180	6.6	15.0	8.1	1.0	330	1600
AUG 27...	1240	42	271	7.7	23.0	4.3	--	920	540

DATE	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
JAN 31...	54	17	2.8	10	1.5	24	--	23	21
APR 25...	69	22	3.5	11	1.4	38	--	23	19
MAY 31...	60	19	3.0	8.9	2.7	36	.0	19	16
AUG 27...	98	32	4.3	14	2.5	70	--	20	25

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHATE, TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
JAN 31...	.0	6.7	106	<1.0	<.10	.63	.19	3.5
APR 25...	.1	2.1	125	<1.0	<.10	.90	.10	3.2
MAY 31...	.1	6.4	113	<1.0	<.10	.70	.20	6.6
AUG 27...	.1	7.6	170	<1.0	<.10	.90	.44	9.6

DATE	TIME	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	BORON, TOTAL RECOV-ERABLE (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)
MAY 31...	0700	40	3	0	20	0	20	3

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	PHENOLS (UG/L)
MAY 31...	1100	1	100	<.5	8	0	20	0

01368000 WALLKILL RIVER NEAR UNIONVILLE, NY

LOCATION.--Lat 41°15'36", long 74°32'56", Sussex County, New Jersey, Hydrologic Unit 02020007, on right bank on downstream side of bridge on the Bassetts Bridge Road, 0.6 mi (1.0 km) upstream from small tributary, 2.0 mi (3.2 km) south of the New York-New Jersey State line, and 3.0 mi (4.8 km) south of Unionville.

DRAINAGE AREA.--140 mi² (363 km²).

PERIOD OF RECORD.--September 1937 to current year.

REVISED RECORDS.--WSP 2102: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 379.28 ft (115.605 m) National Vertical Geodetic Datum of 1929 (levels by Corps of Engineers). Prior to Nov. 16, 1949, nonrecording gage at same site and datum.

REMARKS.--Records fair except those for winter periods, which are poor, and periods of recession above 600 ft³/s (17 m³/s), which may be as much as 35 percent in error. Water diverted from Morris Lake, upstream from station, by the Newton Water and Sewer Authority for municipal use in New Jersey. After use, the water is released into Paulins Kill (Delaware River basin). Diversion records available from the Delaware River Basin Commission.

AVERAGE DISCHARGE.--42 years, 218 ft³/s (6.174 m³/s), 21.15 in/yr (537 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,880 ft³/s (195 m³/s) Aug. 19, 1955, gage height, 13.35 ft (4.069 m); minimum daily, 4.2 ft³/s (0.12 m³/s) Aug. 8-10, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,200 ft³/s (34.0 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 10	0230	1,200	34.0	7.68	2.341	Feb. 27	0130	2,080	58.9	9.36	2.853
Jan. 23	0830	1,420	40.2	8.19	2.496	May 27	2315	1,240	35.1	7.76	2.365
Jan. 25	2100	*a2,500	70.8	*10.78	3.286						

a About.

Minimum discharge, 21 ft³/s (0.59 m³/s) Nov. 9, 10; minimum gage height, 3.04 ft (0.927 m), Oct. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	26	80	171	420	1000	282	263	361	122	49	54
2	26	26	71	617	350	800	278	230	297	110	45	43
3	28	25	65	1020	300	700	308	207	278	95	56	45
4	37	25	72	1000	250	573	328	217	299	81	54	54
5	54	24	127	800	210	542	333	211	263	95	48	45
6	67	24	113	600	180	781	310	184	265	81	41	271
7	78	24	86	383	170	1120	267	173	252	69	38	730
8	53	24	75	700	160	1000	232	159	203	63	37	800
9	40	23	175	1080	140	880	292	150	178	57	32	600
10	33	23	363	1100	130	700	491	139	175	53	31	280
11	33	25	312	700	120	660	491	135	303	59	40	177
12	35	31	211	450	120	700	396	127	724	49	103	133
13	33	26	161	360	110	600	333	148	700	50	258	108
14	32	32	148	330	110	459	373	165	560	52	186	96
15	34	30	124	300	110	411	530	170	380	74	108	142
16	34	25	110	280	100	323	514	144	258	85	74	137
17	31	27	106	250	96	284	433	117	209	254	59	103
18	31	53	90	220	94	258	375	103	186	260	50	86
19	30	88	80	190	92	232	326	144	177	258	65	75
20	30	75	75	180	90	211	288	230	159	167	67	74
21	28	63	106	428	90	196	258	188	137	115	53	72
22	26	54	190	1080	120	186	234	150	124	91	47	333
23	26	49	135	1410	150	180	220	157	129	88	42	461
24	26	75	98	1280	504	190	203	571	120	83	39	380
25	25	91	100	2400	1470	470	190	940	108	77	49	247
26	25	69	144	2730	1970	511	194	1170	95	67	81	180
27	29	53	122	1700	1800	420	306	1000	86	65	63	155
28	40	54	86	1300	1200	342	413	900	80	57	60	140
29	34	56	76	1100	---	317	396	700	90	52	50	184
30	30	63	76	900	---	323	323	598	106	59	67	205
31	28	---	78	634	---	301	---	428	---	57	78	---
TOTAL	1080	1283	3855	25693	10656	15670	9917	10218	7302	2928	2070	6410
MEAN	34.8	42.8	124	829	381	505	331	330	243	94.5	66.8	214
MAX	78	91	363	2730	1970	1120	530	1170	724	260	258	800
MIN	24	23	65	171	90	180	190	103	80	49	31	43
CFSM	.25	.31	.89	5.92	2.72	3.61	2.36	2.36	1.74	.68	.48	1.53
IN.	.29	.34	1.02	6.83	2.83	4.16	2.64	2.72	1.94	.78	.55	1.70

CAL YR 1978 TOTAL 79543 MEAN 218 MAX 2000 MIN 21 CFSM 1.56 IN 21.14
WTR YR 1979 TOTAL 97802 MEAN 266 MAX 2730 MIN 23 CFSM 1.90 IN 25.80

01368950 BLACK CREEK NEAR VERNON, NJ

LOCATION.--Lat 41°13'21", long 74°28'33", Sussex County, Hydrologic Unit 02020007, at bridge on Maple grange road, 0.6 mi (1.0 km) upstream of confluence with Wawayanda Creek, 0.7 mi (1.1 km) northwest of Maple Grange, and 1.7 mi (2.7 km) northeast of Vernon.

DRAINAGE AREA.--17.3 mi² (44.8 km²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)
APR 25...	1140	30	480	8.0	15.0	10.6	1.0	490	350
MAY 23...	1020	23	470	7.2	14.0	7.4	2.0	490	33

DATE	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)
APR 25...	190	45	20	20	1.1	160	--	19	42
MAY 23...	200	47	21	21	1.2	180	.0	19	43

DATE	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN,AMMONIA + ORGANIC TOTAL (MG/L AS N)	PHOSPHATE, TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
APR 25...	.1	4.3	273	<1.0	<.10	.50	.07	7.6
MAY 23...	.2	7.3	298	<1.0	<.10	.70	.21	12

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
MAY 23..	1020	30	1	0	9	1	10	2

DATE	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	PHENOLS (UG/L)
MAY 23...	720	0	160	<.5	0	0	20	1

01376800 HACKENSACK RIVER AT WEST NYACK, NY

LOCATION.--Lat 41°05'44", long 73°57'52", Rockland County, Hydrologic Unit 02030103, on right bank 20 ft (6 m) downstream from Penn Central Transportation Co. railroad bridge at West Nyack, 1,000 ft (305 m) upstream from State Highway 59, and 1.0 mi (1.6 km) downstream from DeForest Lake.

DRAINAGE AREA.--29.4 mi² (76.1 km²).

PERIOD OF RECORD.--December 1958 to current year.

GAGE.--Water-stage recorder and stop-log control. Datum of gage is 53.50 ft (16.307 m) National Geodetic Vertical Datum of 1929 (levels by Hackensack Water Co.).

REMARKS.--Records fair. Flow regulated by DeForest Lake (see Reservoirs in Hackensack River Basin). Diversion from gaging station pool for municipal supply for village of Nyack (see Reservoirs in Hackensack River Basin). Discharge given for this station represents the flow of Hackensack River downstream from this diversion.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,550 ft³/s (43.9 m³/s) Feb. 3, 1973, gage height, 9.38 ft (2.859 m), from floodmarks, from rating curve extended above 840 ft³/s (23.8 m³/s); minimum daily, 2.6 ft³/s (0.074 m³/s) June 12, 1965, Sept. 25, 26, 30, 1966; minimum gage height, 1.70 ft (0.518 m) Oct. 22, 1960.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 940 ft³/s (26.3 m³/s) Jan. 25, gage height, 9.21 ft (2.809 m), from floodmarks on inside of gage door; minimum, 3.0 ft³/s (0.08 m³/s) Oct. 17; minimum gage height, 2.66 ft (0.811 m), Aug. 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	12	41	24	86	55	32	63	135	23	16	16
2	11	11	41	42	71	65	29	18	85	24	16	19
3	9.9	11	41	29	35	68	35	20	86	23	17	30
4	11	9.4	42	16	38	76	38	27	108	25	18	14
5	11	8.9	41	17	38	83	42	30	93	20	17	14
6	12	8.9	41	16	35	366	37	22	81	17	18	30
7	11	8.9	40	18	35	517	34	19	59	16	19	17
8	11	41	44	99	39	101	24	18	46	16	17	14
9	8.9	71	65	24	37	120	59	17	26	17	14	13
10	7.4	74	44	18	32	84	130	15	25	16	18	14
11	7.0	65	35	20	29	164	67	17	29	16	19	13
12	7.0	64	33	19	27	133	32	16	41	16	31	14
13	7.0	63	32	23	27	56	25	17	29	14	25	14
14	9.9	64	32	32	23	85	58	23	23	17	15	16
15	11	66	32	20	20	115	120	23	17	16	16	17
16	6.1	68	32	21	18	51	118	20	17	16	19	14
17	6.1	69	33	20	17	34	69	20	17	15	17	14
18	8.4	72	32	19	18	47	41	20	20	16	17	14
19	8.4	69	32	18	27	42	39	35	27	15	18	14
20	8.9	66	32	18	26	42	34	32	17	15	16	14
21	9.4	65	38	107	24	38	31	27	17	17	16	19
22	9.4	65	33	186	26	32	27	22	18	16	15	57
23	9.4	65	32	174	26	36	27	36	18	17	15	17
24	11	69	33	171	121	33	22	265	19	17	16	14
25	12	65	49	750	431	118	18	808	22	17	16	13
26	13	64	27	320	378	37	24	644	19	17	16	13
27	17	64	14	153	279	29	149	569	19	17	15	12
28	12	64	14	147	101	25	136	515	19	16	15	12
29	12	59	17	126	---	29	56	455	20	15	24	12
30	12	47	18	84	---	32	97	319	20	12	22	15
31	12	---	19	55	---	31	---	224	---	14	14	---
TOTAL	313.2	1546.1	1059	2866	2064	2818	1650	4356	1172	528	547	517
MEAN	10.1	51.5	34.2	92.5	73.7	90.9	55.0	141	39.1	17.0	17.6	17.2
MAX	17	74	65	750	431	517	149	808	135	25	31	57
MIN	6.1	8.9	14	16	17	25	18	15	17	12	14	12

CAL YR 1978 TOTAL 16924.1 MEAN 46.4 MAX 549 MIN 6.1
WTR YR 1979 TOTAL 19436.3 MEAN 53.3 MAX 808 MIN 6.1

01377000 HACKENSACK RIVER AT RIVERVALE, NJ

LOCATION.--Lat 40°59'55", long 73°59'27", Bergen County, Hydrologic Unit 02030103, on upstream right bank at bridge on Westwood Avenue in Rivervale, 1.5 mi (2.4 km) upstream from Pascack Brook, 4.6 mi (7.4 km) upstream from Oradell Dam, and 27.2 mi (43.8 km) upstream from mouth.

DRAINAGE AREA.--58.0 mi^2 (150.2 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1941 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 22.51 ft (6.861 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records excellent. Flow regulated by De Forest Lake and Lake Tappan (see Hackensack River Basin, reservoirs in). Diversions from De Forest Lake and West Nyack, NY, for municipal water supply (see Hackensack River Basin, diversions).

COOPERATION.--Gage-height record collected in cooperation with Hackensack Water Co.

AVERAGE DISCHARGE.--38 years, 90.3 m^3/s (2.557 m^3/s), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,740 ft^3/s (49.3 m^3/s) Sept. 27, 1975, gage height, 7.15 ft (2.179 m); no flow part of Jan. 16, 1970 and May 30, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,230 ft^3/s (34.8 m^3/s) May 25, gage height, 5.34 ft (1.628 m); no flow part of May 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42	98	55	48	93	174	62	118	258	45	103	116
2	67	96	53	70	116	118	64	93	171	45	103	116
3	96	98	53	78	80	129	70	64	196	45	100	118
4	107	105	57	48	64	118	82	60	168	45	105	59
5	106	103	57	45	64	129	82	59	187	46	113	55
6	105	105	53	45	72	500	74	55	190	45	127	89
7	105	105	53	45	59	943	64	53	159	45	135	51
8	104	100	57	135	60	593	59	51	127	43	132	48
9	103	100	105	59	59	251	78	50	124	43	150	48
10	103	100	59	48	70	200	190	48	82	43	153	48
11	103	98	35	46	60	265	196	48	89	43	156	46
12	101	98	32	45	55	265	124	48	93	43	190	46
13	100	98	30	57	51	141	76	48	59	43	80	45
14	102	98	30	72	53	118	89	50	51	42	48	46
15	101	98	30	50	48	171	174	50	48	42	46	50
16	98	98	29	46	48	121	193	46	46	50	45	46
17	98	100	30	46	53	78	203	46	46	46	45	46
18	96	103	29	46	46	80	118	46	46	68	46	51
19	97	87	29	45	46	72	72	72	45	72	50	96
20	96	87	28	45	46	72	66	100	43	45	46	110
21	83	82	42	247	48	68	60	91	45	57	45	110
22	60	82	57	91	51	64	59	80	45	82	45	141
23	43	82	57	57	51	62	59	76	45	98	45	53
24	40	100	57	89	174	62	57	369	43	129	48	48
25	40	84	84	635	531	118	55	704	43	132	46	48
26	58	76	51	961	775	150	53	342	43	144	45	48
27	92	66	43	416	566	68	100	308	43	156	48	46
28	92	68	42	251	372	60	174	251	43	153	82	46
29	89	66	45	210	---	60	206	254	45	153	116	48
30	88	70	42	171	---	62	141	279	45	141	144	55
31	87	---	42	108	---	62	---	272	---	118	129	---
TOTAL	2702	2751	1466	4355	3811	5374	3100	4233	2588	2302	2726	1973
MEAN	87.2	91.7	47.3	140	136	173	103	137	86.3	74.3	87.9	65.8
MAX	107	105	105	961	775	943	206	704	258	156	156	141
MIN	40	66	28	45	46	60	53	46	43	42	45	45

CAL YR 1978 TOTAL 35884 MEAN 98.3 MAX 891 MIN 28
WTR YR 1979 TOTAL 37381 MEAN 102 MAX 961 MIN 28

01377000 HACKENSACK RIVER AT RIVERVALE, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1962, 1964 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
FEB 21...	1050	46	370	7.5	2.0	13.1	1.6	49	17	93	28
MAR 22...	1020	64	305	7.8	7.0	12.1	--	333	88	83	25
JUN 04...	1235	171	280	7.7	19.5	8.1	2.8	240	350	84	26
JUL 24...	1005	129	305	7.9	24.5	6.8	4.2	170	790	93	29
AUG 07...	1005	135	295	8.1	25.5	6.6	3.8	920	2400	94	29
SEP 26...	0950	46	310	7.7	15.0	8.1	3.2	33	212	100	31

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
FEB 21...	5.6	29	1.9	81	0	66	--	23	50	.0
MAR 22...	4.9	22	1.5	68	0	56	--	19	39	.0
JUN 04...	4.7	19	1.8	78	0	64	.0	19	34	.1
JUL 24...	5.1	19	1.9	90	0	74	--	16	36	.1
AUG 07...	5.3	20	2.1	88	0	72	--	17	34	.1
SEP 26...	5.4	18	2.0	90	0	74	.2	21	32	.1

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHATE, TOTAL (MG/L AS PO4)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
FEB 21...	5.5	203	.90	.30	.40	.70	1.6	.02	.02	3.9
MAR 22...	4.7	172	<1.0	<.10	--	1.4	--	.07	.05	4.8
JUN 04...	4.1	165	<1.0	.03	2.7	2.7	--	.86	.05	8.0
JUL 24...	2.9	186	<1.0	.20	1.2	1.4	--	.14	.14	6.4
AUG 07...	3.5	180	<1.0	<.10	--	1.3	--	.33	.05	7.7
SEP 26...	4.2	174	.60	.90	.50	1.4	2.0	.37	.09	3.8

01377000 HACKENSACK RIVER AT RIVERVALE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	NITROGEN,NH4 + ORG. TOT IN BOT MAT (MG/KG AS N)	CARBON, ORGANIC TOT. IN BOTTOM MAT. (G/KG AS C)	CARBON, INORGANIC, TOT IN BOT MAT (G/KG AS C)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (G/KG AS C)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)
JUN 04...	1235	--	--	--	--	30	3	--	0	30	0
SEP 26...	0950	2800	8.8	.0	8.8	10	1	0	10	40	0

DATE	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)
JUN 04...	--	30	--	--	4	--	600	--	11	--	160
SEP 26...	<10	10	<10	<10	8	<10	1200	5000	5	10	230

DATE	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, TOTAL IN BOTTOM MATERIAL (UG/G)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	PHENOLS (UG/L)
JUN 04...	--	<.5	--	8	--	0	--	20	--	0
SEP 26...	280	<.5	.00	1	<10	0	0	10	20	6

DATE	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIAZINON, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG)
JUN 04...	--	--	--	--	--	--	--	--	--	--
SEP 26...	4	.0	6	.9	.8	.3	.0	.3	.0	.0

DATE	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	MALATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	METHOXYCHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARATHION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRITHION, TOT. IN BOTTOM MATL. (UG/KG)	PARATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	TRITHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)
JUN 04...	--	--	--	--	--	--	--	--	--	--
SEP 26...	.0	.0	.0	.0	.0	.0	.0	.0	.0	0

01377500 PASCACK BROOK AT WESTWOOD, NJ

LOCATION.--Lat 40°59'33", long 74°01'19", Bergen County, Hydrologic Unit 02030103, on right bank 75 ft (23 m) upstream from Harrington Avenue in Westwood, 500 ft (150 m) downstream from Musquapsink Brook, and 2.3 mi (3.7 km) upstream from mouth.

DRAINAGE AREA.--29.6 mi² (76.7 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1934 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 28.62 ft (8.723 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records good. Flow regulated by Woodcliff Lake 3.0 mi (4.8 km) above station (see Hackensack River Basin, reservoirs in). Water diverted for municipal supply by Spring Valley Water Works and Supply Co., by pumpage from well fields in headwater area of Pascack Brook in vicinity of Spring Valley, NY, and by Park Ridge Water Department by pumping from wells above Woodcliff Lake probably reduces flow past this station.

COOPERATION.--Gage-height record collected in cooperation with Hackensack Water Co.

AVERAGE DISCHARGE.--45 years, 55.2 ft³/s (1.562 m³/s), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,440 ft³/s (69.1 m³/s) Sept. 12, 1971, gage height, 7.57 ft (2.307 m); minimum, 5.6 ft³/s (0.16 m³/s) June 29, 1965.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 400 ft³/s (11.3 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage Height (ft)	Gage Height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage Height (ft)	Gage Height (m)
Jan. 8	0830	475	13.5	3.54	1.079	Feb. 26	0615	594	16.8	3.83	1.167
Jan. 21	2045	*898	25.4	4.49	1.369	Mar. 6	1945	464	13.1	3.51	1.070
Jan. 24	2215	873	24.7	4.44	1.353	May. 25	1100	820	23.2	4.33	1.320

Minimum discharge, 16 ft³/s (0.45 m³/s) Aug. 8, 9, gage height, 1.52 ft (0.463 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	51	36	39	51	54	67	47	47	78	100	38	45
2	45	35	37	101	37	67	48	46	48	80	34	49
3	42	35	37	85	36	64	49	47	125	46	36	86
4	44	35	41	53	40	64	48	47	125	48	39	56
5	44	34	40	46	61	61	49	46	67	47	32	54
6	45	33	36	46	52	324	46	45	64	45	38	77
7	44	33	35	54	33	308	45	45	48	45	23	36
8	42	33	56	377	33	179	46	48	47	44	17	44
9	42	31	135	114	33	118	71	57	47	42	33	49
10	40	32	83	60	36	114	65	57	46	42	54	47
11	39	31	53	57	40	159	49	65	116	42	57	47
12	37	32	47	47	45	125	48	60	89	42	114	46
13	37	31	45	110	51	80	47	60	49	41	85	46
14	41	31	42	118	64	83	94	62	41	60	47	52
15	40	29	40	47	62	78	120	58	45	51	48	53
16	35	30	41	32	61	75	112	56	56	42	42	47
17	39	41	44	42	53	75	80	54	58	41	40	46
18	38	48	39	41	62	74	47	61	58	69	42	44
19	38	35	37	27	56	72	46	150	56	52	47	41
20	39	35	38	35	64	62	46	101	52	47	45	37
21	39	36	64	683	71	62	45	45	57	47	40	118
22	37	34	46	412	78	62	45	44	57	46	39	108
23	36	38	42	263	78	61	45	114	57	44	38	56
24	30	62	46	384	191	67	45	356	56	41	47	53
25	29	39	101	535	337	61	45	643	81	41	44	53
26	30	32	52	284	398	49	52	293	107	41	42	52
27	44	31	48	263	209	49	77	269	105	39	40	52
28	37	35	45	123	96	47	53	112	103	38	38	51
29	36	35	41	62	---	49	53	57	103	38	67	53
30	36	52	41	78	---	47	48	88	100	39	72	68
31	36	---	53	56	---	47	---	118	---	37	56	---
TOTAL	1212	1074	1544	4686	2431	2850	1711	3351	2141	1477	1434	1666
MEAN	39.1	35.8	49.8	151	86.8	91.9	57.0	108	71.4	47.6	46.3	55.5
MAX	51	62	135	683	398	324	120	643	125	100	114	118
MIN	29	29	35	27	33	47	45	44	41	37	17	36

CAL YR 1978 TOTAL 23926 MEAN 65.6 MAX 616 MIN 29
WTR YR 1979 TOTAL 25577 MEAN 70.1 MAX 683 MIN 17

01378500 HACKENSACK RIVER AT NEW MILFORD, NJ

LOCATION.--Lat 40°56'52", long 74°01'34", Bergen County, Hydrologic Unit 02030103, on right bank upstream from two masonry dams and two lift gates at pumping plant of Hackensack Water Co., New Milford, 4.0 mi (6.4 km) downstream from Pascack Brook, and 21.8 mi (35.1 km) upstream from mouth.

DRAINAGE AREA.--113 mi^2 (293 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1921 to current year. Monthly discharge only for October 1921, published in WSP 1302.

REVISED RECORDS: WSP 601: Drainage area. WSP 711: 1927-28(M). WRD-NJ 1970: 1969. WRD-NJ 1977: 1975(M).

GAGE.--Water-stage recorder above south dam. Datum of gage is 6.25 ft (1.905 m) National Geodetic Vertical Datum of 1929. October 1921 to November 23, 1923, nonrecording gage and Nov. 23, 1923, to Sept. 25, 1934, water-stage recorder at same site at datum 0.05 ft (0.015 m) lower.

REMARKS.--Water-discharge records fair except those below 1.0 ft^3/s (0.028 m^3/s), which are poor. Records given herein do not include diversion at gage. Flow regulated by De Forest Lake, Lake Tappan, Woodcliff Lake 9.0 mi (14.5 km) upstream from station, and Oradell Reservoir 0.6 mi (1.0 km) upstream from station (see Hackensack River Basin, reservoirs in). Water diverted at gage, De Forest Lake, and West Nyack, NY, for municipal supply (see Hackensack River Basin, diversions).

COOPERATION.--Gage-height record collected in cooperation with Hackensack Water Co.

AVERAGE DISCHARGE.--58 years, 105 ft^3/s (2.974 m^3/s), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,500 ft^3/s (127 m^3/s), Nov. 9, 1977, gage height, 7.95 ft (2.423 m) from high-water mark; no flow many days during most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,700 ft^3/s (76.5 m^3/s) Jan. 21, gage height, 5.01 ft (1.527 m); no flow several days during the year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.4	.72	.63	3.3	58	120	105	55	247	4.9	4.9	2.4
2	3.7	.42	.63	.48	55	25	190	47	122	4.4	4.4	.42
3	4.4	.20	.48	.48	55	25	35	28	371	4.7	6.0	.55
4	4.7	.35	.35	.42	61	21	44	23	226	4.4	4.7	1.0
5	4.0	.35	.48	.55	113	23	37	19	126	4.4	4.4	4.4
6	1.3	.35	.81	.55	120	1220	35	21	195	4.7	4.4	5.5
7	.25	.42	.55	.42	94	1470	25	25	79	4.7	4.4	4.0
8	.08	.48	.63	.90	65	775	23	19	62	4.2	4.2	1.7
9	.08	.48	.35	.42	25	385	25	21	59	5.7	4.0	.48
10	.30	.55	.25	.48	23	277	25	21	45	4.7	4.0	.72
11	.30	.48	.48	.63	27	523	65	21	87	4.4	4.7	.48
12	.42	.30	.20	.48	25	322	42	17	164	4.4	4.7	2.6
13	.55	.63	.30	.48	23	176	27	17	35	4.9	4.7	3.5
14	.48	.55	.55	3.5	25	133	277	23	26	4.9	4.2	4.0
15	.55	.42	.35	11	25	176	272	21	28	5.5	4.4	4.9
16	.48	.63	.30	4.7	25	84	251	13	11	3.7	5.7	4.0
17	.48	.55	.55	.42	23	44	251	4.2	.30	4.2	4.7	.81
18	.48	.35	.48	.72	19	32	101	3.7	.34	4.4	4.4	.18
19	.63	.48	.35	.63	23	23	55	4.2	1.2	5.2	4.7	.42
20	.63	.35	.42	.55	23	19	37	12	.30	4.9	4.9	.30
21	.48	.55	.35	1910	23	19	25	20	.50	4.2	4.7	.81
22	.35	.30	.30	1120	23	25	23	9.8	3.5	4.9	4.2	.25
23	.35	.55	.20	810	25	23	25	485	5.2	4.2	4.7	.30
24	.42	.63	.48	813	322	23	23	1120	4.7	5.5	4.7	.48
25	.35	.55	.55	1820	1100	58	17	1870	4.2	5.2	4.4	.48
26	.42	.48	.55	1690	1560	105	21	446	4.9	5.5	4.4	.55
27	.42	.48	.42	775	917	47	105	553	4.9	5.5	3.7	.30
28	.55	.55	.55	369	437	35	261	297	5.2	4.9	4.7	.42
29	.72	.55	.35	133	---	30	230	231	4.2	4.9	4.9	.35
30	.55	.55	.42	163	---	65	75	394	4.4	4.7	3.7	.48
31	.55	---	.55	81	---	172	---	304	---	4.9	4.2	---
TOTAL	33.37	14.25	13.86	9715.11	5314	6475	2727	6164.9	1926.84	147.7	140.8	46.78
MEAN	1.08	.48	.45	313	190	209	90.9	199	64.2	4.76	4.54	1.56
MAX	4.7	.72	.81	1910	1560	1470	277	1870	371	5.7	6.0	5.5
MIN	.08	.20	.20	.42	19	19	17	3.7	.30	3.7	3.7	.18

CAL YR 1978 TOTAL 25714.11 MEAN 70.4 MAX 1690 MIN .00
WTR YR 1979 TOTAL 32719.61 MEAN 89.6 MAX 1910 MIN .08

RESERVOIRS IN HACKENSACK RIVER BASIN, NJ

01376700 DE FOREST LAKE.--Lat 41°06', long 73°57', Rockland County, NY, Hydrologic Unit 02030103, at dam on Hackensack River, 0.85 mi (1.37 km) north of West Nyack, NY. DRAINAGE AREA, 26.6 mi^2 (68.9 km^2). PERIOD OF RECORD, February 1956 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

Reservoir is formed by earthfill dam with sheet piling cutoff and concrete spillway; dam completed and storage began in February 1956. Total capacity at crest of dam 4,068,000,000 gal (15.40 hm^3), elevation, 80.00 ft (24.384 m). Crest of dam topped by two 50-foot (15.24 m) Bascule gates 5 ft (1.5 m) high. Flow regulated by 12-inch (0.3 m) Howell-Bunger valve at elevation, 59.25 ft (18.059 m) and 24-inch Howell-Bunger valve at elevation, 61.25 ft (18.669 m). Reservoir used for storage and water released by Hackensack Water Co., for municipal water supply. Record of elevation and contents furnished by Hackensack Water Co.

01376950 LAKE TAPPAN.--Lat 41°01'05", long 74°00'05", Bergen County, Hydrologic Unit 02030103, at dam on Hackensack River, 0.50 mi (0.80 km) north of Old Tappan. DRAINAGE AREA, about 49 mi^2 (127 km^2). PERIOD OF RECORD, October 1966 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

Reservoir is formed by earthfill dam, completed in 1966. Capacity at spillway level, 3,378,000,000 gal (12.79 hm^3), elevation, 55.00 ft (16.764 m). Flow regulated by four Bascule gates and one sluice gate. Water is released by Hackensack Water Co., for municipal water supply. Record of elevation and contents furnished by Hackensack Water Co.

01377450 WOODCLIFF LAKE.--Lat 41°01', long 74°03', Bergen County, Hydrologic Unit 02030103, at dam on Pascack Brook, 0.75 mi (1.21 km) north of Hillsdale. DRAINAGE AREA, 19.4 mi^2 (50.2 km^2). PERIOD OF RECORD, December 1929 to current year. Monthend contents only prior to September 1953, published in WSP 1302, 1722. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

Reservoir is formed by earthfill dam, completed about 1905. Capacity at spillway level, 835,000,000 gal (3.160 hm^3), elevation, 94.33 ft (28.752 m). Flow is regulated by flashboards and one 36-inch (0.9 m) gate in center of dam. Water is released for diversion at New Milford by Hackensack Water Co., for municipal supply. Record of elevation and contents furnished by Hackensack Water Co.

01378480 ORADELL RESERVOIR.--Lat 40°57', long 74°02', Bergen County, Hydrologic Unit 02030103, at dam on Hackensack River at Oradell. DRAINAGE AREA, 113 mi^2 (293 km^2). PERIOD OF RECORD, December 1922 to current year. Monthend contents only prior to September 1953, published in WSP 1302, 1722. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

Reservoir is formed by hollow concrete dam, completed in 1922. Capacity at spillway level, 2,850,000,000 gal (10.79 hm^3), elevation, 22.66 ft (6.907 m). Flow regulated by seven sluice gates (7 by 9 ft or 2.1 by 2.7 m). Water is released for diversion by Hackensack Water Co., 1 mi (2 km) downstream from dam for municipal supply. Record of elevation and contents furnished by Hackensack Water Co.

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

Date	Elevation (feet)	Contents (million gallons)	Change in contents (equivalent in ft^3/s)	Elevation (feet)	Contents (million gallons)	Change in contents (equivalent in ft^3/s)	Elevation (feet)	Contents (million gallons)	Change in contents (equivalent in ft^3/s)
	01376700	DE FOREST LAKE †		01376950	LAKE TAPPAN †		01377450	WOODCLIFF LAKE †	
Sept. 30	83.14	5,054	-	51.82	2,495	-	82.15	275	-
Oct. 31	82.18	4,753	-15.0	46.67	1,161	-66.5	75.53	97	-.9
Nov. 30	79.17	3,833	-47.4	44.88	790	-19.1	76.20	110	+.7
Dec. 31	79.48	3,921	+4.4	47.45	1,348	+27.8	82.85	299	+9.4
CAL YR 1978	-	-	-7.6	-	-	-9.1	-	-	-2.2
Jan. 31	85.25	5,726	+90.0	55.01	3,488	+107	90.20	619	+15.9
Feb. 28	85.25	5,726	0	55.01	3,488	0	90.30	624	+.3
Mar. 31	85.20	5,709	-.8	54.99	3,482	-.3	90.22	621	-.2
Apr. 30	85.17	5,698	-.6	55.01	3,488	+.3	92.01	713	+.8
May 31	85.15	5,691	-.4	55.04	3,498	+.5	90.12	616	-4.8
June 30	84.47	5,478	-11.0	54.51	3,321	-9.1	80.90	233	-19.8
July 31	82.80	4,939	-26.9	51.40	2,378	-47.0	75.76	102	-6.5
Aug. 31	82.50	4,844	-4.7	48.42	1,577	-39.9	77.61	142	+2.0
Sept. 30	83.29	5,095	+12.9	48.09	1,495	-4.2	84.88	375	+12.0
WTR YR 1979	-	-	+.2	-	-	-4.2	-	-	+.4

Date	Elevation (feet)	Contents (million gallons)	Change in contents (equivalent in ft^3/s)
	01378480	ORADELL RESERVOIR †	
Sept. 30	17.05	1,925	-
Oct. 31	16.92	1,900	-1.2
Nov. 30	16.85	1,877	-.7
Dec. 31	17.58	2,027	+7.0
CAL YR 1978	-	-	-4.5
Jan. 31	22.15	3,016	+49.3
Feb. 28	21.26	2,809	-11.4
Mar. 31	22.71	3,150	+17.0
Apr. 30	23.18	3,272	+6.3
May 31	23.28	3,297	+1.2
June 30	21.39	2,840	-23.5
July 31	18.52	2,218	-31.1
Aug. 31	18.58	2,231	+.6
Sept. 30	19.93	2,514	+14.6
WTR YR 1979	-	-	+2.5

† Elevation at 0800 on first day of following month.

DIVERSIONS FROM HACKENSACK RIVER BASIN, NJ

01376699 Spring Valley Water Co., diverts water at De Forest Lake for municipal supply in Rockland County, NY. Records furnished by Spring Valley Water Co.

01376810 Village of Nyack, NY, diverts water from Hackensack River 100 ft (30 m) downstream from gaging station on Hackensack River at West Nyack, NY (sta 01376800) for municipal supply. Records furnished by Board of Water Commissioners of Nyack, NY.

01378490 Hackensack Water Co., diverts water for municipal supply from Oradell Reservoir at Haworth pumping station 2.0 mi (3.2 km) upstream from gaging station on Hackensack River at New Milford and from Hackensack River about 50 ft (15 m) above gaging station on Hackensack River at New Milford, NJ (sta 01378500).

01378520 Hackensack Water Co., diverts water from Hirshfeld Brook, a tributary of the Hackensack River, below the gaging station on Hackensack River at New Milford, NJ, for municipal supply. Records furnished by Hackensack Water Co.

DIVERSIONS, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

Month	01376699 SPRING VALLEY WATER CO.	01376810 WEST NYACK, NY	01378490 HACKENSACK WATER CO.
October	10.9	2.30	145
November	11.5	2.27	146
December	10.8	2.15	144
CAL YR 1978	11.4	2.59	157
January	9.70	2.19	144
February	9.50	2.23	144
March	11.0	2.14	141
April	11.0	2.23	139
May	11.4	2.27	148
June	14.3	2.50	163
July	19.1	2.79	175
August	12.2	2.59	167
September	7.95	2.40	147
WTR YR 1979	11.6	2.34	150

Tabulation of diversion by pumpage from sources other than the Hackensack River into Oradell Reservoir. These figures are included in diversions from Hackensack River as noted above.

DIVERSIONS, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

Month	SPARKILL CREEK (HUDSON RIVER BASIN)	01378520 HIRSHFELD BROOK (HACKENSACK RIVER BASIN)	SADDLE RIVER (PASSAIC RIVER BASIN)	WELLS TO SURFACE SUPPLY
October	0	0.71	10.3	1.71
November	0	1.09	10.6	1.67
December	0	1.90	15.3	1.67
CAL YR 1978.	0	0.92	7.93	0.84
January	0	1.39	8.27	0.32
February	0	0	1.60	0
March	0	0	3.54	0
April	0	0	0	0
May	0	0	0.54	0
June	0	0.38	7.47	0.59
July	0	1.15	14.1	1.54
August	0	0.34	12.6	1.46
September	0	0.01	18.2	1.38
WTR YR 1979.	0	0.59	8.60	0.87

01379000 PASSAIC RIVER NEAR MILLINGTON, NJ

LOCATION.--Lat 40°40'48", long 74°31'45", Somerset County, Hydrologic Unit 02030103, on right bank 200 ft (60 m) downstream from Davis Bridge, 0.7 mi (1.1 km) northwest of Millington, and 1.8 mi (2.9 km) downstream from Black Brook.

DRAINAGE AREA.--55.4 mi^2 (143.5 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--November 1903 to June 1906 (published as "at Millington"), October 1921 to current year. Monthly discharge only for some periods published in WSP 1302.

REVISED RECORDS.--WSP 781: Drainage area. WSP 1552: 1905(M).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 215.60 ft (65.715 m) National Geodetic Vertical Datum of 1929 (levels from New Jersey Geological Survey bench mark). Nov. 25, 1903 to July 15, 1906, nonrecording gage at bridge 0.8 mi (1.3 km) downstream at different datum. Nov. 10, 1921 to Sept. 1, 1923, nonrecording gage at site 200 ft (60 m) downstream at present datum. Oct. 31, 1923 to July 3, 1925, nonrecording gage and concrete control at present site and datum.

REMARKS.--Water-discharge records good except those for winter periods, which are fair. Diversions from Osborn Pond by Commonwealth Water Co., Bernards Division, since June 24, 1903, for municipal supply (records given herein).

AVERAGE DISCHARGE.--59 years (1904-05, 1921-79) 90.3 ft^3/s (2.557 m^3/s), 22.12 in/yr (562 mm/yr), adjusted for diversion.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,000 ft^3/s (56.6 m^3/s) Jan. 9, 1905, (gage height, 7.8 ft or 2.38 m, from graph based on gage readings, site and datum then in use) from rating curve extended above 1,400 ft^3/s (39.6 m^3/s) on basis of velocity-area study; maximum gage height, 9.73 ft (2.966 m) Aug. 29, 1971; minimum discharge, 0.2 ft^3/s (0.006 m^3/s) Sept. 12, 13, 1966, gage height, 3.76 ft (1.146 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 500 ft^3/s (14.2 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage Height (ft)	Gage Height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage Height (ft)	Gage Height (m)
Jan. 8	2130	700	19.8	7.23	2.204	Mar. 7	0600	748	21.2	7.35	2.240
Jan. 25	0745	*1300	36.8	8.73	2.661	May 26	0315	817	23.1	7.52	2.292
Feb. 26	2215	1080	30.6	8.19	2.496						

Minimum discharge, 13 ft^3/s (0.368 m^3/s) Nov. 9, 10, 11, 12, 13, 14, 15, 16, 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	19	102	115	159	692	79	129	171	30	19	19
2	19	16	86	253	134	494	88	96	125	31	19	16
3	17	17	73	412	123	358	129	76	115	28	22	17
4	15	15	86	355	120	271	127	79	177	26	37	19
5	18	15	119	266	100	228	131	67	164	29	28	17
6	21	14	113	161	85	395	109	51	145	26	20	177
7	20	14	98	123	75	714	91	48	127	24	24	353
8	18	14	93	472	70	643	83	46	106	22	19	294
9	17	14	234	632	60	501	104	42	86	22	17	277
10	16	13	392	520	50	355	204	38	71	21	17	240
11	15	13	342	386	45	334	179	36	84	22	21	179
12	14	14	277	255	35	308	152	37	196	23	51	111
13	15	13	201	149	27	244	123	54	156	21	119	65
14	21	13	142	174	29	207	149	54	119	21	98	46
15	24	14	100	210	33	187	244	62	100	30	70	50
16	19	13	81	149	30	149	196	51	81	24	59	37
17	18	15	78	117	28	131	166	44	64	50	46	33
18	18	55	64	89	52	117	131	44	52	34	37	30
19	18	58	46	115	43	104	107	76	40	52	40	26
20	19	47	34	59	50	83	91	107	35	30	32	23
21	19	45	109	372	80	76	75	88	33	23	26	31
22	18	54	147	765	60	78	64	70	34	23	23	244
23	18	40	113	688	80	75	64	109	41	22	20	308
24	18	75	100	699	125	83	61	436	35	22	21	240
25	17	81	240	1240	526	185	58	738	32	20	30	204
26	17	59	266	1180	961	174	61	785	30	19	31	161
27	36	45	240	997	1040	159	164	692	28	19	26	115
28	33	45	174	658	892	129	237	540	29	18	23	78
29	25	48	134	406	---	111	225	398	31	20	22	61
30	23	91	78	277	---	102	179	310	28	28	24	75
31	22	---	62	207	---	83	---	237	---	21	22	---
TOTAL	607	989	4424	12501	5112	7770	3871	5640	2535	801	1063	3546
MEAN	19.6	33.0	143	403	183	251	129	182	84.5	25.8	34.3	118
MAX	36	91	392	1240	1040	714	244	785	196	52	119	353
MIN	14	13	34	59	27	75	58	36	28	18	17	16
(†)	1.2	1.2	1.2	1.0	1.1	1.5	0	0	0	0	0	0
MEAN‡	20.8	34.2	144	404	184	252	129	182	84.5	25.8	34.3	118
CFSM‡	0.38	0.62	2.60	7.29	3.32	4.54	2.33	3.29	1.53	0.47	0.62	2.13
IN‡	0.43	0.69	3.00	8.41	3.46	5.24	2.60	3.79	1.70	0.54	0.71	2.38

CAL YR 1978 TOTAL 47271 MEAN 130 MAX 955 MIN 10 MEAN‡ 131 CFSM‡ 2.36 IN‡ 32.12
WTR YR 1979 TOTAL 48859 MEAN 134 MAX 1240 MIN 13 MEAN‡ 134 CFSM‡ 2.42 IN‡ 32.95

† Diversion, in cubic feet per second, from Osborn Pond for municipal supply. Records of diversion furnished by Commonwealth Water Co., Bernards Division.

‡ Adjusted for diversion.

01379000 PASSAIC RIVER NEAR MILLINGTON, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1923-25, 1962 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
JAN 24...	0955	601	120	6.5	.5	11.0	1.5	130	350	30	7.3
MAR 21...	1040	74	174	7.5	8.0	9.9	.3	23	49	50	12
MAY 17...	1040	44	198	7.4	18.5	5.3	1.8	540	350	66	16
JUL 03...	1015	28	180	7.4	21.0	5.8	1.8	230	130	61	15
AUG 09...	1025	17	205	7.3	22.5	4.5	1.1	80	13	65	16
SEP 20...	1245	23	170	7.3	15.5	6.3	.9	<200	1300	47	12

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
JAN 24...	2.8	11	1.2	15	0	12	--	10	18	.0
MAR 21...	4.8	11	1.3	37	0	30	--	21	18	.1
MAY 17...	6.3	14	.9	66	0	54	.0	13	18	.1
JUL 03...	5.8	10	.7	66	0	54	--	14	14	.1
AUG 09...	6.0	15	1.3	68	0	56	--	12	18	.1
SEP 20...	4.1	8.2	1.8	61	0	50	.0	11	16	.1

DATE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHATE, TOTAL (MG/L AS PO4)	PHOSPHATE, ORTHO, DISSOLVED (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
JAN 24...	5.5	70	<1.0	<.10	--	.48	--	.12	.12	4.4
MAR 21...	6.8	106	<1.0	<.10	--	.30	--	.09	.08	8.1
MAY 17...	13	127	<1.0	<.10	--	.80	--	.35	.33	12
JUL 03...	15	132	.17	.05	.91	.96	1.1	.33	.21	5.8
AUG 09...	19	131	.03	.07	1.7	1.8	1.8	.41	.29	6.7
SEP 20...	12	135	.12	.58	.38	.96	1.1	.34	.25	10

01379000 PASSAIC RIVER NEAR MILLINGTON, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	NITROGEN,NH4 + ORG. TOT IN BOT MAT (MG/KG AS N)	CARBON, ORGANIC TOT. IN BOTTOM MAT. (G/KG AS C)	CARBON, INORGANIC, TOT IN BOT MAT (G/KG AS C)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (G/KG AS C)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)
MAY 17...	1040	--	--	--	--	20	1	--	0	70	2
SEP 20...	1245	5900	18	.1	18	20	1	0	10	80	0

DATE	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)
MAY 17...	--	30	--	--	3	--	1500	--	3	--	150
SEP 20...	<10	10	30	20	2	40	1000	32000	0	180	80

DATE	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, TOTAL IN BOTTOM MATERIAL (UG/G)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	PHENOLS (UG/L)
MAY 17...	--	<.5	--	32	--	0	--	20	--	0
SEP 20...	280	<.5	.00	0	20	0	0	0	90	0

DATE	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIAZINON, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG)
MAY 17...	--	--	--	--	--	--	--	--	--	--
SEP 20...	2	.0	3	3.3	1.3	.1	.0	.0	.0	.0

DATE	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	MALATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	METHOXYCHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARATHION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRITHION, TOT. IN BOTTOM MATL. (UG/KG)	PARATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	TRITHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)
MAY 17...	--	--	--	--	--	--	--	--	--	--
SEP 20...	.0	.0	.0	.0	.0	.0	.0	.0	.0	0

01379500 PASSAIC RIVER NEAR CHATHAM, NJ

LOCATION.--Lat 40°43'31", long 74°23'23", Morris County, Hydrologic Unit 02030103, on left bank 150 ft (46 m) downstream from Stanley Avenue bridge in Chatham, and 3.0 mi (4.8 km) upstream from Canoe Brook.

DRAINAGE AREA.--100 mi² (259 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February 1903 to December 1911, October 1937 to current year. Monthly discharge only for some periods, published in WSP 1302.

GAGE.--Water-stage recorder and concrete control since Sept. 19, 1938. Datum of gage is 193.51 ft (58.982 m) National Geodetic Vertical Datum of 1929. Prior to Dec. 31, 1911, nonrecording gage at bridge 150 ft (46 m) upstream at different datum.

REMARKS.--Water-discharge records good except those for winter periods, which are fair. Diversion from Osborn Pond by Commonwealth Water Co., Bernards Division, since June 24, 1903, for municipal supply (records given herein).

AVERAGE DISCHARGE.--50 years (1903-11, 1937-79), 171 ft³/s (4.842 m³/s), 23.22 in/yr (590 mm/yr), adjusted for diversion since 1970.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,380 ft³/s (95.7 m³/s) Aug. 2, 1973, gage height, 9.36 ft (2.853 m) from floodmark; minimum, 2.0 ft³/s (0.057 m³/s) many days in May and June 1903, August and October 1905, September and October 1906, and September 11, 1944.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 800 ft³/s (22.7 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage Height (ft)	Gage Height (m)	Date	Time	Discharge (ft³/s	Discharge (m³/s)	Gage Height (ft)	Gage Height (m)
Jan. 10	1015	1040	29.5	5.76	1.756	Mar. 7	2330	1130	32.0	5.87	1.789
Jan. 26	0530	*1710	48.4	6.88	2.097	May 25	0415	1300	36.8	6.20	1.890
Feb. 27	1915	1420	40.2	6.40	1.951	Sept. 6	0930	1260	35.7	6.13	1.868

Minimum discharge, 26 ft³/s (0.74 m³/s) Oct. 24, 25, 26, gage height, 3.28 ft (1.000 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35	37	182	197	436	1310	143	239	439	49	34	36
2	35	36	146	433	250	1160	151	177	314	53	72	31
3	34	33	119	617	200	977	194	138	233	50	70	28
4	39	32	151	639	170	757	224	130	237	47	50	29
5	37	31	234	528	140	577	253	123	267	46	53	31
6	52	30	210	396	130	848	228	103	237	46	56	630
7	43	30	163	305	110	1080	174	91	197	41	46	479
8	36	29	164	780	90	1090	148	87	167	38	35	414
9	33	29	485	911	85	977	217	81	140	36	30	350
10	32	29	606	959	80	823	377	74	118	36	35	301
11	32	28	623	807	75	745	359	69	184	35	54	251
12	31	28	532	664	64	646	297	73	342	36	180	182
13	30	29	426	418	57	523	231	80	322	36	234	120
14	36	29	331	356	45	421	306	97	233	50	164	90
15	36	29	228	349	40	354	416	107	161	42	113	89
16	37	30	152	307	45	289	402	99	129	41	89	74
17	34	47	138	236	45	231	331	80	108	50	76	57
18	31	126	128	172	40	204	257	85	102	76	68	51
19	31	112	101	205	60	177	204	120	83	68	69	46
20	34	83	80	324	70	159	162	204	66	66	65	42
21	34	71	235	812	80	138	138	177	57	43	54	72
22	33	68	302	1010	110	128	113	130	57	36	44	502
23	31	73	243	1070	137	125	105	235	66	35	40	494
24	27	130	185	1200	390	143	103	751	63	35	50	440
25	27	130	424	1570	666	310	97	1180	54	33	55	340
26	30	104	450	1700	1130	314	103	1200	51	32	49	260
27	77	83	413	1620	1340	261	293	1110	48	31	50	187
28	63	78	354	1440	1370	221	363	982	47	29	43	135
29	48	81	260	1190	---	194	354	842	54	41	41	104
30	40	173	180	909	---	181	310	713	53	51	39	132
31	38	---	127	647	---	159	---	572	---	43	39	---
TOTAL	1156	1848	8372	22771	7455	15522	7053	10149	4629	1351	2097	5997
MEAN	37.3	61.6	270	735	266	501	235	327	154	43.6	67.6	200
MAX	77	173	623	1700	1370	1310	416	1200	439	76	234	630
MIN	27	28	80	172	40	125	97	69	47	29	30	28
(†)	1.0	1.2	1.2	1.0	1.1	1.5	0	0	0	0	0	0
MEAN‡	38.3	62.8	271	736	267	502	235	327	154	43.6	67.6	200
CFSM‡	0.38	0.63	2.71	7.36	2.67	5.02	2.35	3.27	1.54	0.44	0.68	2.00
IN‡	0.44	0.70	3.13	8.48	2.78	5.79	2.62	3.77	1.72	0.50	0.78	2.23

CAL YR 1978 TOTAL 78086 MEAN 214 MAX 1330 MIN 27 MEAN‡ 216 CFSM‡ 2.16 IN‡ 29.27
WTR YR 1979 TOTAL 88400 MEAN 242 MAX 1700 MIN 27 MEAN‡ 243 CFSM‡ 2.43 IN‡ 32.94

† Diversion, in cubic feet per second, from Osborn Pond for municipal supply. Records of diversion furnished by Commonwealth Water Co., Bernards Division.

‡ Adjusted for diversion.

01379500 PASSAIC RIVER NEAR CHATHAM, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1962 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1966 to September 1968.
SUSPENDED-SEDIMENT DISCHARGE: July 1963 to September 1968.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
JAN 24...	1235	1060	195	6.8	.5	11.4	2.7	330	920	35	8.6
MAR 21...	1215	135	540	7.6	10.0	10.2	1.6	350	27	71	17
MAY 31...	1155	571	158	7.1	19.0	5.4	1.9	330	330	49	12
JUL 03...	1200	50	640	7.6	24.0	6.0	5.2	430	>2400	100	25
AUG 09...	1215	30	355	7.5	25.5	5.2	4.2	170	110	96	25
SEP 27...	1415	204	240	7.2	15.0	8.0	2.8	E1300	E500	56	14

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
JAN 24...	3.4	21	1.3	17	0	14	--	17	34	.0
MAR 21...	6.9	67	1.6	71	0	58	--	56	91	.1
MAY 31...	4.5	10	1.4	46	0	38	.0	17	14	.1
JUL 03...	9.9	79	2.5	90	0	74	--	55	100	.2
AUG 09...	8.2	30	2.6	88	0	72	--	32	36	.2
SEP 27...	5.2	22	2.1	46	0	38	.3	29	24	.1

DATE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHATE, TOTAL (MG/L AS PO4)	PHOSPHATE, ORTHO, DISSOLVED (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
JAN 24...	6.1	108	<1.0	.20	.67	.87	--	.30	.29	4.3
MAR 21...	9.9	288	<1.0	.60	.27	.87	--	.88	.50	7.1
MAY 31...	12	112	<1.0	.30	.20	.50	--	.88	.50	14
JUL 03...	15	374	1.5	.65	1.4	2.1	3.6	1.7	1.5	10
AUG 09...	19	218	2.2	.49	3.3	3.8	6.0	1.7	1.4	6.8
SEP 27...	12	159	1.0	.40	.50	.90	1.9	.81	.76	8.7

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
MAY								
31...	1155	100	3	0	50	0	20	7
SEP								
27...	1415	30	1	10	90	0	20	7

DATE	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	PHENOLS (UG/L)
MAY								
31...	1200	8	70	<.5	9	0	30	0
SEP								
27...	1400	3	100	<.5	3	0	20	5

01380500 ROCKAWAY RIVER ABOVE RESERVOIR, AT BOONTON, NJ

LOCATION.--Lat 40°54'06", long 74°24'40", Morris County, Hydrologic Unit 02030103, on right bank at Morris Avenue in Boonton, 1.8 mi (2.9 km) upstream from dam at Boonton Reservoir.

DRAINAGE AREA.--116 mi^2 (300 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1937 to current year. Monthly discharge only for October 1937, published in WSP 1302.

REVISED RECORDS.--WRD-NJ 1974: 1938(m). WDR NJ-78-1: 1949(m), 1952(m), 1968(m), 1971(m), 1973(p), 1974(m), 1977(m).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 364.47 ft (111.090 m) National Geodetic Vertical Datum of 1929 (levels from New Jersey Geological Survey bench mark).

REMARKS.--Water-discharge records fair. Flow regulated by Splitrock Reservoir 14.5 mi (23.3 km) above station (see Passaic River Basin, reservoirs in). Town of Boonton diverts water for municipal supply from Taylortown Reservoir on Stony Brook, capacity, 75,000,000 gal (283,900 m^3) and by pumping from wells in vicinity of Boonton. The mean diversion during the water year from Taylortown Reservoir was 0.7 ft^3/s (0.02 m^3/s). Rockaway Valley trunk sewer bypasses the station (see station 01381000).

COOPERATION.--Gage-height record collected in cooperation with Jersey City, Bureau of Water.

AVERAGE DISCHARGE.--42 years, 225 ft^3/s (6.372 m^3/s), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,430 ft^3/s (154 m^3/s) , Jan. 25, 1979, gage height, 7.06 ft (2.152 m); minimum daily, 10 ft^3/s (0.28 m^3/s) Aug. 10, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 950 ft^3/s (26.9 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage Height (ft)	Gage Height (m)
Jan. 3	0130	1070	30.3	4.11	1.253
Jan. 8	1730	1850	52.4	5.06	1.542
Jan. 21	1445	1770	50.1	4.98	1.518
Jan. 25	1100	*5430	154	7.06	2.152
Feb. 26	1730	1640	46.4	4.83	1.472
Mar. 7	0130	1920	54.4	5.14	1.567
May 25	1700	1420	40.2	4.57	1.393
Sept. 7	0345	2200	62.3	5.42	1.652

Minimum discharge, 40 ft^3/s (1.13 m^3/s) Oct. 23, gage height, 1.92 ft (0.585 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	51	49	189	281	483	628	331	383	417	133	58	77
2	53	56	158	614	425	580	352	339	333	119	59	64
3	50	56	144	937	372	541	381	310	395	109	71	171
4	61	56	179	502	332	487	374	324	454	103	258	118
5	86	53	217	392	287	474	370	294	365	114	139	85
6	82	54	186	359	260	1040	331	264	332	98	113	998
7	69	53	161	354	240	1670	282	245	305	87	142	1620
8	59	53	173	1400	230	1220	262	235	273	80	90	679
9	53	50	513	1240	220	914	358	232	249	77	74	402
10	51	54	687	739	210	735	552	217	232	74	72	288
11	61	69	407	539	200	884	445	198	335	68	92	234
12	64	75	313	388	195	790	370	194	599	71	256	198
13	61	77	270	420	185	634	338	238	372	85	511	175
14	73	88	242	608	180	561	458	244	295	131	262	168
15	88	84	217	466	175	525	570	248	244	145	158	242
16	64	95	203	381	170	453	456	216	217	115	115	171
17	61	110	206	319	165	409	405	185	197	304	89	144
18	56	231	189	289	160	390	369	177	201	185	85	126
19	58	164	149	192	160	363	341	286	213	161	117	113
20	53	125	158	263	165	343	311	389	182	124	101	99
21	47	108	304	1110	170	318	280	298	161	110	82	129
22	44	99	266	1510	175	290	255	242	151	93	73	725
23	43	108	209	885	180	281	254	267	163	80	66	465
24	44	278	186	956	470	316	244	707	142	82	69	278
25	43	196	355	4220	810	636	229	1280	130	85	78	228
26	44	144	331	2410	1310	516	244	1220	120	72	78	204
27	77	125	254	1510	1140	429	736	970	109	68	69	180
28	68	133	183	1120	721	382	714	733	104	62	60	165
29	58	130	152	858	---	378	563	583	112	64	98	160
30	50	203	138	682	---	376	451	505	126	78	223	182
31	50	---	133	563	---	349	---	475	---	66	121	---
TOTAL	1822	3176	7472	26507	9790	17912	11626	12498	7528	3243	3879	8888
MEAN	58.8	106	241	855	350	578	388	403	251	105	125	296
MAX	88	278	687	4220	1310	1670	736	1280	599	304	511	1620
MIN	43	49	133	192	160	281	229	177	104	62	58	64

CAL YR 1978 TOTAL 91359 MEAN 250 MAX 2140 MIN 40
WTR YR 1979 TOTAL 114341 MEAN 313 MAX 4220 MIN 43

01381000 ROCKAWAY RIVER BELOW RESERVOIR, AT BOONTON, NJ

LOCATION.--Lat 40°53'47", long 74°23'36", Morris County, Hydrologic Unit 02030103, on right bank 2,000 ft (610 m) downstream from Boonton Reservoir Dam at Boonton.

DRAINAGE AREA.--119 mi^2 (308 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March to December 1903; January, February 1904 (gage height only); January 1906 to September 1950 (monthly discharge only, published in WSP 1302) October 1950 to current year (figures of daily discharge for October 1950 to September 1954 published in Special Report 16 of New Jersey Department of Environmental Protection). Published as "near Boonton" 1903-4, and as "at Boonton" 1906-37.

REVISED RECORDS.--WSP 1902: 1951-54.

GAGE.--Water-stage recorder. Concrete control since Nov. 5, 1936. Datum of gage is 195.68 ft (59.643 m) National Geodetic Vertical Datum of 1929 (levels from New Jersey Geological Survey bench mark). Mar. 15, 1903 to Feb. 2, 1904, nonrecording gage at site 1.9 mi (3.1 km) downstream at different datum. Jan. 1, 1906 to Mar. 3, 1918, nonrecording gage on Boonton Dam 2,000 ft (610 m) upstream at datum 305.25 ft (93.040 m) National Geodetic Vertical Datum of 1929 (levels from New Jersey Geological Survey bench mark).

REMARKS.--Water-discharge records good. Records represent flow in river only. Sewage effluent enters river about 600 ft (183 m) below station (records given herein). Flow regulated by Boonton Reservoir (see Passaic River Basin, reservoirs in) 2,000 ft (610 m) above station, and by Splitrock Reservoir (see Passaic River Basin, reservoirs in) 16.5 mi (26.5 km) above station. Water diverted from Boonton Reservoir for municipal supply of Jersey City (see Passaic River Basin, diversions).

COOPERATION.--Gage-height records for station and records of sewage effluent furnished by Jersey City, Bureau of Water.

AVERAGE DISCHARGE.--73 years (1906-79), 137 ft^3/s (3.880 m^3/s), adjusted for sewage effluent since October 1930.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 7,560 ft^3/s (214 m^3/s), Oct. 10, 1903; no flow for many days in some years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,380 ft^3/s (124 m^3/s) Jan. 25, gage height, 8.30 ft (2.530 m); minimum, 4.4 ft^3/s (0.12 m^3/s) Nov. 20, gage height, 1.42 ft (0.433 m).

REVISIONS.--The maximum discharges for some water years have been revised, as shown in the following table. They supercede figures published in WSP 1302, 1672, 1722, 2102 and the reports for 1971, 1972, 1973, 1974, and 1977.

Water year	Date	Discharge (ft^3/s)	Discharge (m^3/s)	Gage Height (ft)	Gage Height (m)
1949	Dec. 31, 1948	2680	75.9	6.76	2.060
1952	June 2, 1952	3100	87.8	7.18	2.188
1968	May 29, 1968	4260	121	8.20	2.499
1970	Apr. 3, 1970	3080	87.2	7.16	2.182
1971	Aug. 29, 1971	2700	76.5	6.78	2.067
1972	June 1, 1972	3290	93.2	7.36	2.243
1973	Feb. 3, 1973	3150	89.2	7.22	2.201
1974	Dec. 22, 1973	3190	90.3	7.26	2.213
1977	Mar. 23, 1977	3050	86.4	7.13	2.173

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	12	12	14	379	507	213	278	319	13	13	12
2	12	12	12	19	259	458	226	239	250	13	13	12
3	12	12	12	14	278	428	256	203	256	12	13	12
4	12	12	12	13	250	379	259	203	337	13	13	12
5	12	12	12	157	216	356	256	191	285	13	12	13
6	12	12	12	256	119	648	236	174	236	13	12	60
7	12	12	12	256	163	1460	168	147	200	12	12	1860
8	12	13	13	943	163	1080	147	132	174	12	12	908
9	12	14	18	1270	157	771	203	123	147	12	12	432
10	12	13	13	700	103	585	356	101	128	12	12	250
11	12	13	13	471	99	621	337	81	163	13	12	160
12	12	13	12	337	86	632	275	76	387	13	18	112
13	12	13	12	312	86	494	233	108	312	13	13	87
14	13	13	12	415	86	423	285	121	216	13	32	81
15	12	13	12	383	62	391	399	132	157	13	47	116
16	12	13	12	285	68	334	348	108	119	13	27	92
17	13	13	11	223	50	278	295	78	96	13	13	56
18	13	9.2	11	191	37	266	259	62	96	13	13	60
19	13	15	13	110	47	256	229	119	91	13	13	79
20	13	17	19	135	50	233	200	243	79	13	13	75
21	12	12	14	695	65	206	174	216	53	13	13	41
22	12	11	12	1710	76	171	149	149	41	13	13	30
23	12	12	12	863	89	157	135	142	44	13	13	64
24	13	8.9	12	720	216	171	125	415	34	13	13	179
25	13	11	17	3460	798	383	112	955	21	13	12	144
26	12	11	13	2990	1260	399	116	1030	15	13	12	144
27	13	11	12	1670	1140	316	360	819	14	13	12	191
28	12	12	12	1040	665	269	526	606	13	13	12	219
29	12	12	12	745	---	256	423	462	12	13	12	163
30	12	13	12	585	---	250	348	399	13	13	12	103
31	12	---	12	462	---	243	---	360	---	13	12	---
TOTAL	380	370.1	395	21444	7067	13421	7648	8472	4308	398	461	5767
MEAN	12.3	12.3	12.7	692	252	433	255	273	144	12.8	14.9	192
MAX	13	17	19	3460	1260	1460	526	1030	387	13	47	1860
MIN	12	8.9	11	13	37	157	112	62	12	12	12	12
(†)	11.0	10.7	11.6	17.0	15.5	16.9	14.4	13.5	12.8	10.7	10.5	12.4

CAL YR 1978 TOTAL 58525.1 MEAN 160 MAX 1830 MIN 8.9 † 12.3
WTR YR 1979 TOTAL 70131.1 MEAN 192 MAX 3460 MIN 8.9 † 13.1

† Sewage effuent, in cubic feet per second.

01381200 ROCKAWAY RIVER AT PINE BROOK, NJ

LOCATION.--Lat 40°51'29", long 74°20'53", Morris County, Hydrologic Unit 02030103, at bridge on U.S. Route 46 at intersection with New Road in Pine Brook, and 1.1 mi (1.8 km) upstream of mouth.

DRAINAGE AREA.--136 mi² (352 km²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1963 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
JAN 29...	1055	165	7.3	2.5	12.8	2.1	1600	542	40	10
MAR 15...	1130	186	7.5	3.5	13.0	1.3	2	<2	43	11
MAY 21...	1015	208	7.4	17.5	7.3	2.5	330	130	59	15
JUL 10...	1045	425	7.6	19.5	4.8	11	--	--	120	31
AUG 14...	0930	355	7.4	18.0	4.0	5.4	>24000	1600	100	27

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
JAN 29...	3.7	14	1.2	24	0	20	--	14	25	.1
MAR 15...	3.7	15	1.1	32	0	26	--	16	26	.1
MAY 21...	5.3	14	1.4	46	0	38	.0	17	23	.1
JUL 10...	11	32	4.2	129	0	106	--	30	47	.1
AUG 14...	8.2	22	3.5	98	0	80	--	26	32	.1

DATE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHATE, TOTAL (MG/L AS PO4)	PHOSPHATE, ORTHO, DISSOLVED (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
JAN 29...	6.5	94	<1.0	<.10	--	.69	--	.29	.16	4.1
MAR 15...	7.8	105	<1.0	.40	.60	1.0	--	.24	.22	3.5
MAY 21...	7.8	115	--	.40	.70	1.1	--	1.0	.75	5.8
JUL 10...	14	240	--	--	--	--	--	--	--	11
AUG 14...	13	204	2.0	3.1	.70	3.8	5.8	1.7	1.3	6.3

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
MAY 21...	1015	20	1	0	40	1	10	7

DATE	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	PHENOLS (UG/L)
MAY 21...	710	15	80	<.5	20	0	10	0

01381500 WHIPPANY RIVER AT MORRISTOWN, NJ

LOCATION.--Lat 40°48'21", long 74°27'22", Morris County, Hydrologic Unit 02030103, on left bank at Morristown sewage-disposal plant, 0.8 mi (1.3 km) downstream from Morristown, and 9.0 mi (14.5 km) upstream from mouth.

DRAINAGE AREA.--29.4 mi² (76.1 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1921 to current year.

REVISED RECORDS.--WSP 781: Drainage area. WSP 1552: 1922-23(M), 1924, 1925-27(M) 1928-29, 1930-32(M), 1933-34. WRD-NJ 1974: 1965.

GAGE.--Water-stage recorder and crest-stage gage. Concrete control since July 1, 1936. Datum of gage is 260.01 ft (79.251 m) National Geodetic Vertical Datum of 1929 (levels from New Jersey Geological Survey bench mark). Prior to July 16, 1930, nonrecording gage at same site and datum.

REMARKS.--Water-discharge records good except those above 600 ft³/s (17.0 m³/s), which are fair. Flow occasionally regulated by operation of gates in Pocahontas Dam, 2.5 mi (4.0 km) above station.

AVERAGE DISCHARGE.--58 years, 52.1 ft³/s (1.475 m³/s) 24.06 in/yr (611 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,280 ft³/s (64.6 m³/s) Aug. 28, 1971, gage height, 7.60 ft (2.316 m); minimum, 2.8 ft³/s (0.08 m³/s) Aug. 27, 1932, gage height, 0.73 ft (0.223 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 450 ft³/s (12.7 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage Height (ft)	Gage Height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage Height (ft)	Gage Height (m)
Jan. 8	1115	801	22.7	4.76	1.451	Mar. 6	2015	829	23.3	a4.83	1.472
Jan. 21	1830	1470	41.6	a6.25	1.905	May. 26	0300	479	13.6	3.91	1.192
Jan. 25	0815	*2080	58.9	a7.40	2.256	Sept. 7	Unknown	1320	37.4	a5.94	1.811
Feb. 26	0500	1010	28.6	a5.25	1.600						

a - from crest-stage gage

Minimum discharge, 13 ft³/s (0.37 m³/s) Oct. 24, gage height, 1.82 ft (0.555 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	17	34	91	110	136	73	76	87	48	26	35
2	21	16	26	200	95	130	91	72	79	38	32	25
3	20	15	24	207	85	119	98	72	165	37	41	66
4	18	20	48	70	82	105	90	79	154	44	103	47
5	22	16	55	55	76	112	97	69	95	42	33	33
6	25	16	31	55	71	442	81	63	83	34	44	450
7	24	16	25	77	68	378	69	62	76	32	56	600
8	20	15	39	597	70	184	68	61	70	31	29	250
9	20	15	190	188	65	152	113	59	67	30	25	120
10	20	16	134	103	67	141	159	57	66	30	29	80
11	18	15	45	82	62	209	90	54	133	31	34	52
12	17	14	34	71	61	145	78	64	168	34	153	43
13	16	14	32	103	59	121	75	75	72	31	190	42
14	29	15	30	152	59	126	152	76	64	36	100	51
15	24	15	27	89	59	120	150	69	59	40	56	76
16	18	16	26	67	51	101	99	55	54	40	47	40
17	17	33	32	62	50	100	89	47	54	84	37	37
18	16	77	25	61	56	93	80	60	58	58	35	34
19	17	28	25	56	73	87	74	94	52	51	45	32
20	19	21	26	56	73	85	70	97	46	32	38	30
21	17	19	95	777	53	80	68	63	45	29	32	74
22	16	18	47	404	68	78	67	54	50	28	28	332
23	16	26	31	148	65	74	65	110	69	28	26	111
24	15	85	31	496	243	110	61	216	47	27	29	61
25	16	30	134	1130	446	188	61	263	46	28	30	54
26	23	22	68	310	688	102	77	223	38	31	30	51
27	35	21	39	232	217	81	220	134	38	34	26	46
28	21	25	31	195	144	75	145	114	38	26	24	43
29	18	27	27	161	---	89	106	112	51	34	40	48
30	18	61	27	136	---	82	82	111	45	37	86	87
31	18	---	33	123	---	76	---	106	---	28	50	---
TOTAL	616	744	1471	6554	3316	4121	2848	2867	2169	1133	1554	3050
MEAN	19.9	24.8	47.5	211	118	133	94.9	92.5	72.3	36.5	50.1	102
MAX	35	85	190	1130	688	442	220	263	168	84	190	600
MIN	15	14	24	55	50	74	61	47	38	26	24	25
CFSM	.68	.84	1.62	7.18	4.01	4.52	3.23	3.15	2.46	1.24	1.70	3.47
IN.	.78	.94	1.86	8.29	4.20	5.21	3.60	3.63	2.74	1.43	1.97	3.86

CAL YR 1978 TOTAL 23778 MEAN 65.1 MAX 740 MIN 14 CFSM 2.21 IN 30.09
WTR YR 1979 TOTAL 30443 MEAN 83.4 MAX 1130 MIN 14 CFSM 2.84 IN 38.52

01381500 WHIPPANY RIVER AT MORRISTOWN, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1923-24, 1926, 1962 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
FEB 15...	1300	56	270	7.4	1.5	13.4	1.0	800	49	80	20
MAR 27...	1400	79	222	7.7	8.5	12.7	--	700	200	67	17
MAY 31...	0920	114	212	7.6	17.5	9.0	2.2	17000	4900	62	16
JUL 19...	1250	43	235	7.8	24.0	9.0	4.2	>24000	5400	71	18
AUG 13...	1150	89	136	7.5	16.5	9.4	2.3	5400	3500	43	11

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
FEB 15...	7.2	18	1.5	59	0	48	--	22	31	.1
MAR 27...	5.9	14	1.6	46	0	38	--	19	26	.1
MAY 31...	5.4	12	1.4	51	0	42	.0	18	24	.1
JUL 19...	6.4	15	2.2	59	0	48	--	19	25	.1
AUG 13...	3.7	8.7	1.5	37	0	30	--	12	12	.1

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHATE, TOTAL (MG/L AS PO4)	PHOS-PHATE, ORTHO DIS-SOLVED (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
FEB 15...	19	170	1.7	.50	.40	.90	2.6	1.6	1.0	2.2
MAR 27...	15	137	<1.0	.30	.70	1.0	--	.58	.51	3.2
MAY 31...	16	130	1.4	.30	.40	.70	2.1	.73	.60	3.5
JUL 19...	15	158	1.3	<.10	--	1.4	2.7	1.0	1.0	5.2
AUG 13...	12	93	<1.0	.16	1.4	1.6	--	.36	.36	7.2

DATE	TIME	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	BORON, TOTAL RECOV-ERABLE (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)
MAY 31...	0920	90	2	0	10	0	30	6

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	PHENOLS (UG/L)
MAY 31...	900	12	90	<.5	11	0	30	0

01381800 WHIPPANY RIVER NEAR PINE BROOK, NJ

LOCATION.--Lat 40°50'42", long 74°20'51", Morris County, Hydrologic Unit 02030103, at bridge on New Road, 0.3 mi (0.5 km) southwest of overpass of Interstate 280, 2,000 ft (610 m) upstream of Rockaway River, and 1.4 mi (2.3 km) southwest of Pine Brook.

DRAINAGE AREA.--68.5 mi² (177.4 km²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1963 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
JAN 29...	1325	800	168	7.0	.5	10.3	2.8	>2400	1600	41	11
MAR 15...	1310	--	270	7.4	5.5	11.0	2.6	17000	1700	73	19
MAY 21...	1250	150	352	7.5	18.0	5.9	4.0	7900	500	100	28
JUL 10...	1335	47	480	7.7	23.0	4.9	1.3	--	--	130	35
AUG 14...	1150	215	245	7.0	18.0	4.4	4.6	16000	5400	73	21

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
JAN 29...	3.4	15	1.6	24	0	20	--	15	25	.1
MAR 15...	6.1	20	1.7	61	0	50	--	25	33	.1
MAY 21...	8.0	27	2.2	105	0	86	.0	30	33	.1
JUL 10...	11	43	2.7	150	0	123	--	44	40	.1
AUG 14...	5.0	10	2.1	59	0	48	--	30	20	.1

DATE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHATE, TOTAL (MG/L AS PO4)	PHOSPHATE, ORTHO, DISSOLVED (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
JAN 29...	5.9	92	<1.0	.30	.30	.60	--	.33	.33	5.6
MAR 15...	11	158	<1.0	.60	1.0	1.6	--	.66	.48	6.0
MAY 21...	15	218	1.5	.80	.60	1.4	2.9	1.0	.80	10
JUL 10...	15	286	--	--	--	--	--	--	--	10
AUG 14...	10	163	1.0	.30	1.2	1.5	2.5	.78	.53	15

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
MAY 21...	1250	30	2	0	130	2	10	13

DATE	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	PHENOLS (UG/L)
MAY 21...	1900	23	180	<.5	13	0	30	0

01382000 PASSAIC RIVER AT TWO BRIDGES, NJ

LOCATION.--Lat 40°53'40", long 74°16'23", Passaic County, Hydrologic Unit 02030103, at bridge on Two Bridges Road in Two Bridges, 50 ft (15 m) upstream from Pompton River.

DRAINAGE AREA.--361 mi² (935 km²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1962 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: June 1969 to September 1974.
pH: June 1969 to September 1974.
WATER TEMPERATURES: October 1962 to September 1974.
DISSOLVED OXYGEN: June 1969 to September 1974.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
FEB 15...	1105	470	7.3	1.0	10.0	6.0	<2	<2	110	27
MAR 15...	0930	212	7.0	4.5	9.3	2.0	70	13	51	13
JUN 07...	0850	248	7.2	19.5	3.7	4.2	2400	240	72	19
JUL 17...	1145	650	7.6	26.0	2.4	4.0	1100	490	140	36
AUG 20...	1010	480	7.5	20.0	2.8	>8.5	>2400	79	120	32

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
FEB 15...	9.5	41	3.2	102	0	84	--	41	57	.1
MAR 15...	4.5	17	1.4	37	0	30	--	21	27	.1
JUN 07...	5.9	17	2.0	66	0	54	.0	22	25	.1
JUL 17...	11	67	4.0	137	0	112	--	67	79	.1
AUG 20...	9.4	34	3.8	122	0	100	--	42	52	.1

DATE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHATE, TOTAL (MG/L AS PO4)	PHOSPHATE, ORTHO, DISSOLVED (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
FEB 15...	17	265	1.1	4.5	.00	4.5	5.6	2.7	2.0	8.0
MAR 15...	7.6	120	<1.0	.50	1.2	1.7	--	.39	.31	5.5
JUN 07...	11	155	.80	.52	2.0	2.5	3.3	1.0	.67	12
JUL 17...	15	392	2.0	2.9	1.7	4.6	6.6	3.0	1.9	5.4
AUG 20...	16	295	2.7	4.2	.00	4.2	6.9	.20	.11	8.6

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
JUN 07...	0850	30	3	0	90	0	20	10

DATE	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	PHENOLS (UG/L)
JUN 07...	1600	12	160	<.5	15	0	20	0

01382500 PEQUANNOCK RIVER AT MACOPIN INTAKE DAM, NJ

LOCATION.--Lat 41°01'00", long 74°23'47", Morris County, Hydrologic Unit 02030103, on left bank at Macopin intake dam of Newark water-works, 0.4 mi (0.6 km) downstream from Macopin River, and 3.0 mi (4.8 km) northwest of Butler.

DRAINAGE AREA.--63.7 mi² (165.0 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1898 to current year. Monthly discharge only for some periods, published in WSP 1302. Records for January 1892 to December 1897, published in WSP 541, have been found to be unreliable and should not be used.

GAGE.--Water-stage recorder above dam. Datum of gage is 570.00 ft (173.736 m) National Geodetic Vertical Datum of 1929 (levels by New Jersey Geological Survey). Prior to May 22, 1970, at datum 13.55 ft (4.130 m) higher.

REMARKS.--Water-discharge records good except those below 50 ft³/s (1.42 m³/s), which are fair. Records given herein represent flow over intake dam only. Flow regulated by Canistear, Oak Ridge, Clinton, Charlotteburg Reservoirs, and Echo Lake (see Passaic River Basin, reservoirs in). Water diverted above intake dam for municipal supply of city of Newark (see Passaic River Basin, diversions).

COOPERATION.--Gage-height record collected in cooperation with the Department of Public Affairs, Division of Water Supply, city of Newark. Prior to May 22, 1970, discharge figures furnished by city of Newark.

AVERAGE DISCHARGE.--81 years, 51.5 ft³/s (1.458 m³/s), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 6,100 ft³/s (173 m³/s) Oct. 10, 1903, gage height, 17.4 ft (5.30 m) present datum; no flow over dam during several months of most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 890 ft³/s (25.2 m³/s) May 25, gage height, 14.67 ft (4.471 m); no flow part or all of some days during the year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.2	3.2	5.9	22	18	9.7	77	110	59	.00	2.2	4.4
2	3.2	3.2	4.4	77	15	12	77	59	15	5.9	2.2	3.2
3	3.2	4.4	4.4	51	12	9.7	103	31	18	4.4	3.2	7.6
4	4.4	4.4	5.9	18	12	7.6	110	31	43	2.2	4.4	5.9
5	4.4	5.9	5.9	15	7.6	12	103	22	18	2.2	4.4	4.4
6	5.9	5.9	4.4	12	7.6	138	77	18	43	1.4	4.4	165
7	3.2	5.9	4.4	22	5.9	207	31	12	9.7	1.4	5.9	110
8	2.2	5.9	4.4	144	7.6	362	22	9.7	1.4	1.4	2.2	31
9	2.2	7.6	43	43	9.7	243	37	7.6	.57	1.4	2.2	12
10	2.2	7.6	18	22	13	221	165	5.9	4.4	2.2	1.4	7.6
11	3.2	7.6	9.7	15	15	353	158	5.9	18	2.2	2.2	5.9
12	3.2	5.9	7.6	15	22	266	110	5.9	158	1.4	18	7.6
13	4.4	5.9	7.6	15	15	221	77	7.6	125	1.4	18	7.6
14	5.9	5.9	7.6	27	13	214	158	7.6	37	2.2	4.4	9.7
15	5.9	4.4	5.9	12	12	200	236	5.9	12	1.4	3.2	7.6
16	4.4	4.4	5.9	9.7	7.6	172	193	4.4	12	1.4	2.2	5.9
17	2.2	5.9	4.4	9.7	9.7	151	151	2.2	9.7	1.4	.57	5.9
18	2.2	7.6	5.9	12	9.7	145	110	2.2	7.6	2.2	1.4	5.9
19	3.2	4.4	5.9	12	7.6	125	67	22	5.9	1.4	2.2	3.2
20	3.2	3.2	4.4	7.6	5.9	110	37	22	5.9	2.2	3.2	3.2
21	3.2	3.2	9.7	144	3.2	103	27	15	3.2	1.4	3.2	9.7
22	3.2	2.2	7.6	51	1.4	85	22	15	2.2	.57	3.2	43
23	3.2	3.2	5.9	22	2.2	37	15	22	.57	1.4	2.2	9.7
24	.57	7.6	5.9	179	67	37	15	132	.00	1.4	3.2	7.6
25	2.2	4.4	9.7	304	59	304	12	669	.00	1.4	3.2	7.6
26	2.2	2.2	7.6	281	85	304	18	541	.00	1.4	3.2	7.6
27	3.2	3.2	5.9	165	15	200	125	337	.00	1.4	3.2	7.6
28	3.2	3.2	5.9	51	9.7	138	273	221	.00	2.2	3.2	7.6
29	2.2	3.2	5.9	37	---	125	243	138	.00	3.2	3.2	7.6
30	3.2	5.9	4.4	31	---	119	165	119	.00	4.4	7.6	9.7
31	2.2	---	5.9	27	---	95	---	95	---	3.2	7.6	---
TOTAL	100.47	147.5	240.0	1853.0	468.4	4726.0	3014	2695.9	609.14	61.67	130.87	531.3
MEAN	3.24	4.92	7.74	59.8	16.7	152	100	87.0	20.3	1.99	4.22	17.7
MAX	5.9	7.6	43	304	85	362	273	669	158	5.9	18	165
MIN	.57	2.2	4.4	7.6	1.4	7.6	12	2.2	.00	.00	.57	3.2

CAL YR 1978 TOTAL 16811.47 MEAN 46.1 MAX 1150 MIN .57
WTR YR 1979 TOTAL 14578.25 MEAN 39.9 MAX 669 MIN .00

01383500 WANAQUE RIVER AT AWOSTING, NJ

LOCATION.--Lat 41°09'31", long 74°20'00", Passaic County, Hydrologic Unit 02030103, on right bank 700 ft (210 m) downstream from dam at outlet of Greenwood Lake at Awosting.

DRAINAGE AREA.--27.1 mi^2 (70.2 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1919 to current year. Prior to October 1940, published as "at Greenwood Lake".

REVISED RECORDS.--WSP 781: Drainage area. WSP 1552: 1922(M), 1928(M), 1936.

GAGE.--Water-stage recorder. Concrete control since Oct. 31, 1938. Datum of gage is 601.32 ft (183.282 m) National Geodetic Vertical Datum of 1929 (levels from New Jersey Geological Survey bench mark). Prior to Apr. 1, 1926, nonrecording gage and Apr. 1, 1926, to Oct. 31, 1938, water-stage recorder at site 100 ft (30 m) upstream at same datum.

REMARKS.--Records good except those above 750 cfs and below 2.0 cfs, which are fair. Flow completely regulated by Greenwood Lake (see Passaic River Basin, reservoirs in).

COOPERATION.--Gage-height record collected in cooperation with North Jersey District Water Supply Commission.

AVERAGE DISCHARGE.--60 years, 53.5 ft^3/s (1.515 m^3/s), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,840 ft^3/s (52.1 m^3/s) revised, Oct. 16, 1955 (gage height, 5.85 ft or 1.783 m) from rating curve extended above 750 ft^3/s (21.24 m^3/s); no flow at times when gates at Greenwood Lake were closed and water below the spillway.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 200 ft^3/s (5.66 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage Height (ft)	Gage Height (m)
Jan. 3	0915	248	7.02	3.26	0.994
Jan. 9	0030	297	8.41	3.41	1.039
Jan. 25	1630	886	25.1	4.51	1.375
Mar. 8	1330	421	11.9	3.70	1.128
May 26	0415	544	15.4	3.93	1.198
Sept. 6	2345	*1300	36.8	*5.08	1.548

Minimum discharge, 0.80 ft^3/s (0.023 m^3/s) Oct. 27, gage height, 0.35 ft (0.107 m).

REVISIONS.--Some peak discharges and the annual maximum(*) for water years 1933, 1936, 1945, 1949, 1951, 1952, 1953, 1955, 1956, 1957, 1958, 1960, 1961, and 1969 have been revised as shown in the following table. They supersede figures published in WSP 741, WSP 801, WSP 1031, WSP 1141, WSP 1202, WSP 1232, WSP 1272, WSP 1382, WSP 1432, WSP 1502, WSP 1552, WSP 1702, and the state reports for 1961, 1968, and 1969.

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage Height (ft)	Gage Height (m)
Aug. 24, 1933	--	*847	24.0	*4.45	1.356
Mar. 12, 1936	--	1110	31.4	*4.82	1.469
July 20, 1945	--	*612	17.3	*4.05	1.234
Dec. 31, 1948	1830	1020	28.9	*4.70	1.433
Nov. 26, 1950	1300	568	16.1	3.97	1.210
Dec. 9, 1950	0100	556	15.7	3.95	1.204
Mar. 31, 1951	0500	*1540	43.6	*5.44	1.658
Mar. 12, 1952	0600	712	21.2	4.23	1.289
Apr. 6, 1952	0800	580	16.4	3.99	1.216
June 2, 1952	0600	1230	34.8	*4.97	1.515
Nov. 23, 1952	0500	*586	16.6	*4.00	1.219
Aug. 13, 1955	2000	1210	34.3	4.95	1.509
Aug. 19, 1955	1600	*1640	46.4	*5.58	1.701
Oct. 16, 1955	1100	*1840	52.1	*5.85	1.783
Apr. 7, 1957	0400	*538	15.2	*3.92	1.195
Dec. 21, 1957	1400	*893	25.3	*4.52	1.378
Apr. 5, 1960	2200	*623	17.6	*4.07	1.241
Sep. 13, 1960	0800	574	16.3	3.98	1.213
Feb. 26, 1960	1400	650	18.4	*4.12	1.256
May 29, 1968	2300	1240	35.1	*4.99	1.521
Mar. 25, 1969	2215	586	16.6	4.00	1.219
Aug. 5, 1969	unknown	*1380	39.1	*5.20	1.585

01383500 WANAQUE RIVER AT AWOSTING, NJ--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.3	8.8	6.8	40	131	151	85	131	129	13	4.8	32
2	2.1	8.5	5.9	109	107	144	80	109	102	13	4.8	28
3	2.1	8.5	5.3	238	90	140	82	93	93	13	14	28
4	2.1	9.1	5.0	224	79	131	82	92	90	11	48	26
5	2.1	10	5.0	190	70	129	82	80	79	12	39	22
6	2.1	8.8	5.0	160	60	212	76	66	69	9.0	32	710
7	2.0	8.8	5.0	140	53	396	70	58	58	7.2	27	1170
8	2.0	8.5	5.9	251	52	379	57	52	51	6.6	20	635
9	1.9	8.5	25	280	46	312	70	47	46	5.3	15	362
10	1.8	8.5	59	235	41	248	92	44	42	5.0	11	232
11	1.8	8.5	58	190	36	267	90	40	57	4.8	14	167
12	1.9	8.5	54	153	33	238	95	36	82	5.0	32	121
13	1.9	8.1	51	133	31	198	90	38	67	4.8	59	92
14	2.0	8.1	47	135	28	183	107	42	55	4.5	54	80
15	1.9	8.1	40	119	25	163	131	39	47	4.5	49	90
16	1.9	7.8	38	102	25	133	131	37	41	5.3	39	73
17	2.0	7.8	36	88	22	113	125	31	35	11	30	59
18	1.7	8.1	31	80	21	98	113	28	33	11	27	47
19	1.6	7.8	30	67	25	85	97	52	28	11	32	42
20	1.5	7.8	25	60	27	76	82	76	21	9.0	30	30
21	1.6	7.8	36	167	27	67	73	74	16	7.9	26	33
22	1.6	7.5	35	287	25	60	64	70	13	7.9	26	111
23	1.8	7.5	33	248	23	54	60	84	14	7.6	21	133
24	1.5	7.5	33	248	44	60	52	204	12	6.6	19	115
25	1.2	7.5	54	792	95	121	47	437	9.5	6.9	21	97
26	1.2	6.8	51	704	163	133	48	506	6.2	6.6	25	84
27	3.0	6.8	45	466	188	121	109	423	5.6	7.1	21	70
28	9.1	6.8	42	330	167	107	151	319	6.9	5.6	19	59
29	9.1	6.8	34	254	---	102	167	245	9.7	5.3	20	58
30	9.1	6.8	30	196	---	97	149	193	12	5.3	35	53
31	9.1	---	28	155	---	90	---	158	---	4.8	39	---
TOTAL	87.0	240.4	958.9	6841	1734	4808	2757	3904	1329.9	237.6	853.6	4859
MEAN	2.81	8.01	30.9	221	61.9	155	91.9	126	44.3	7.66	27.5	162
MAX	9.1	10	59	792	188	396	167	506	129	13	59	1170
MIN	1.2	6.8	5.0	40	21	54	47	28	5.6	4.5	4.8	22

CAL YR 1978 TOTAL 23247.98 MEAN 63.7 MAX 936 MIN .20
WTR YR 1979 TOTAL 28610.40 MEAN 78.4 MAX 1170 MIN 1.2

01384000 WANAQUE RIVER AT MONKS, NJ

LOCATION.--Lat 41°07'14", long 74°17'41", Passaic County, Hydrologic Unit 02030103, on left bank just upstream from Wanaque Reservoir and 0.3 mi (0.5 km) downstream from bridge on Stonetown Road at Monks.

DRAINAGE AREA.--40.4 mi² (104.6 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1934 to current year. Monthly discharge only for October to December 1934, published in WSP 1302.

GAGE.--Water-stage recorder and concrete dam. Datum of gage is 303.17 ft (92.406 m) National Geodetic Vertical Datum of 1929 (levels from New Jersey Geological Survey bench mark).

REMARKS.--Water-discharge records good. Records given herein include flow over spillway, through ports in dam, and down fish ladder in dam. Flow regulated by Greenwood Lake (see Passaic River Basin, reservoirs in).

COOPERATION.--Gage-height record collected in cooperation with North Jersey District Water Supply Commission.

AVERAGE DISCHARGE.--45 years, 82.3 ft³/s (2.330 m³/s), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,800 ft³/s (108 m³/s) Sept. 6, 1979, gage height, 4.24 ft (1.292 m); no flow part of day in some years just after waste gate was closed and water was below intake to ports.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 400 ft³/s (11.3 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage Height (ft)	Gage Height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage Height (ft)	Gage Height (m)
Jan. 2	2230	554	15.7	1.68	0.512	Feb. 26	0745	500	14.2	1.60	0.488
Jan. 8	1215	633	17.9	1.79	0.546	Mar. 6	2045	842	23.8	2.05	0.625
Jan. 21	1745	686	19.4	1.86	0.567	May 25	0900	783	22.2	1.98	0.604
Jan. 24	2215	1480	41.9	2.69	0.820	Sept. 6	1030	*3800	108	4.24	1.292

Minimum discharge, 3.0 ft³/s(0.085 m³/s) Sept. 11, 12, 13, 14, gage height 0.08 ft (0.024 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.0	12	18	87	176	222	116	170	158	22	8.0	46
2	4.0	11	15	295	154	213	110	144	129	20	8.0	40
3	4.0	11	14	429	121	204	116	126	124	19	8.0	38
4	4.0	11	17	331	106	188	116	122	119	17	51	39
5	4.0	11	21	257	96	192	119	110	102	18	50	34
6	4.5	11	18	217	85	480	106	92	91	16	41	927
7	5.0	11	15	196	74	611	99	82	78	12	38	800
8	4.0	11	18	540	68	461	85	75	68	11	29	512
9	4.0	11	87	417	62	353	111	68	62	10	23	336
10	4.0	11	124	320	55	295	151	62	58	9.3	17	236
11	3.5	11	95	257	50	347	132	58	86	8.5	16	178
12	3.0	11	84	204	46	290	127	53	115	8.5	37	135
13	3.0	11	77	180	43	243	122	59	88	8.5	91	105
14	4.0	10	72	209	40	226	171	61	72	8.5	75	94
15	6.9	10	63	169	37	201	192	58	61	8.5	64	116
16	5.0	10	59	140	35	165	180	52	54	8.5	52	88
17	4.0	12	57	121	32	145	168	47	47	13	43	72
18	4.0	22	49	112	30	128	150	42	44	15	36	61
19	4.0	14	47	151	34	113	131	105	40	15	39	54
20	4.0	12	40	82	38	102	114	117	32	15	39	42
21	4.0	11	67	467	38	93	101	102	27	13	35	45
22	4.0	11	63	461	36	86	91	92	23	12	34	197
23	4.0	10	57	342	35	79	85	128	22	11	31	177
24	4.0	21	53	500	100	92	76	419	21	11	26	142
25	4.0	15	90	1230	209	220	70	677	17	10	26	120
26	3.5	13	84	800	353	189	70	580	13	10	31	104
27	5.0	12	72	561	280	165	204	471	12	10	29	89
28	10	12	72	423	239	144	215	359	11	9.4	27	76
29	12	12	90	325	---	139	231	283	18	9.0	25	72
30	12	18	55	257	---	132	194	230	19	9.0	52	70
31	12	---	47	209	---	122	---	194	---	8.4	52	---
TOTAL	157.4	369	1740	10289	2672	6640	3953	5238	1811	376.1	1133.0	5045
MEAN	5.08	12.3	56.1	332	95.4	214	132	169	60.4	12.1	36.5	168
MAX	12	22	124	1230	353	611	231	677	158	22	91	927
MIN	3.0	10	14	82	30	79	70	42	11	8.4	8.0	34

CAL YR 1978 TOTAL 29503.0 MEAN 80.8 MAX 1140 MIN 1.3
WTR YR 1979 TOTAL 39423.5 MEAN 108 MAX 1230 MIN 3.0

01387000 WANAQUE RIVER AT WANAQUE, NJ

LOCATION.--Lat 41°02'33", long 74°17'36", Passaic County, Hydrologic Unit 02030103, on left bank 750 ft (229 m) downstream from Raymond Dam in Wanaque, and 50 ft (15 m) upstream from bridge on State Highway 511.

DRAINAGE AREA.--90.4 mi² (234.1 km²), considered as 94 mi² (243 km²) Oct. 1, 1928, to Sept. 30, 1934.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--December 1903 to December 1905 (gage heights only), September 1912 to April 1915, May 1919 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 210.00 ft (64.008 m) National Geodetic Vertical Datum of 1929 (levels from New Jersey Geological Survey bench mark). Dec. 16, 1903, to Dec. 31, 1905, nonrecording gage on highway bridge at site 50 ft (15 m) downstream at different datum. Sept. 15, 1912, to Apr. 1, 1922, nonrecording gage at site 200 ft (61 m) downstream from present concrete control at different datum. Apr. 1, 1922 to Mar. 14, 1931, water-stage recorder at site 400 ft (122 m) downstream from present concrete control at present datum.

REMARKS.--Water-discharge records good. Flow regulated by Greenwood Lake (see Passaic River Basin, reservoirs in) 11 mi (17.7 km) above station, and since 1928 by Wanaque Reservoir (see Passaic River Basin, reservoirs in). North Jersey Water Supply Commission diverts water for municipal supply from Wanaque Reservoir. Water is diverted to Wanaque Reservoir from Post Brook at Wanaque and from Ramapo River at Pompton Lakes (see Passaic River Basin, diversions).

COOPERATION.--Gage-height record collected in cooperation with North Jersey District Water Supply Commission.

AVERAGE DISCHARGE.--62 years, (1912-14, 1919-79), 78.9 ft³/s (2.234 m³/s), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,470 ft³/s (240 m³/s) Mar. 31, 1951 (gage height, 9.12 ft or 2.780 m) from rating curve extended above 4,300 ft³/s (122 m³/s); minimum daily, 0.5 ft³/s (0.014 m³/s) Dec. 11, 12, 14-23, 1949, Sept. 11, 12, 1965.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,870 ft³/s (53.0 m³/s) May 25, gage height, 6.07 ft (1.850 m); minimum, 9.3 ft³/s (0.26 m³/s) Feb. 28, gage height, 1.15 ft (0.351 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	18	18	18	18	19	131	226	199	18	18	17
2	17	18	18	19	18	19	129	171	148	18	19	18
3	17	18	18	19	18	19	140	151	144	18	19	18
4	18	18	18	19	18	19	140	148	153	18	18	17
5	17	18	17	19	18	20	135	133	121	18	18	17
6	18	18	18	19	18	97	129	73	100	18	18	45
7	17	18	18	19	18	1170	119	58	88	18	18	19
8	17	18	18	24	18	1120	45	49	88	17	18	18
9	17	18	19	20	18	789	74	43	88	18	19	18
10	26	18	18	19	18	566	174	42	88	19	19	18
11	19	18	18	19	18	687	140	42	90	19	18	18
12	19	18	18	18	18	579	129	42	93	19	20	18
13	18	18	18	19	18	418	123	42	88	18	18	18
14	19	18	18	19	18	341	199	43	88	18	18	18
15	18	18	18	18	18	292	318	41	86	18	18	18
16	18	18	18	18	18	212	292	43	86	18	18	18
17	18	18	18	18	18	164	255	44	86	18	18	18
18	18	18	18	18	18	135	212	42	86	18	18	18
19	18	18	18	18	18	111	155	43	40	18	18	18
20	18	20	18	18	18	100	104	42	18	18	18	18
21	18	19	18	28	18	49	71	41	18	16	18	19
22	18	18	18	20	18	23	54	39	18	16	18	19
23	18	18	18	19	18	22	56	39	17	18	17	18
24	19	19	18	27	21	28	43	305	17	19	18	18
25	18	18	19	28	20	176	41	1600	18	19	18	18
26	18	18	18	21	23	252	42	1600	18	19	18	19
27	18	18	18	20	20	220	111	1160	18	18	17	19
28	18	18	18	19	19	171	267	793	18	18	17	18
29	18	18	18	19	---	162	350	526	18	18	18	18
30	18	18	18	19	---	148	276	353	18	18	17	19
31	18	---	18	18	---	127	---	264	---	18	17	---
TOTAL	564	544	559	616	517	8255	4454	8238	2156	559	559	570
MEAN	18.2	18.1	18.0	19.9	18.5	266	148	266	71.9	18.0	18.0	19.0
MAX	26	20	19	28	23	1170	350	1600	199	19	20	45
MIN	17	18	17	18	18	19	41	39	17	16	17	17

CAL YR 1978 TOTAL 39071 MEAN 107 MAX 2190 MIN 17
WTR YR 1979 TOTAL 27591 MEAN 75.6 MAX 1600 MIN 16

01387000 WANAQUE RIVER AT WANAQUE, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1963 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: October 1963 to current year.

COOPERATION.--Once daily water temperature records provided by North Jersey District Water Supply Commission. Analyses of fecal coliform and fecal streptococci by the MPN method, and selected water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: Maximum daily, 24.5°C Aug. 19, 20, 1965; minimum daily, 1.0°C Jan. 31, 1966, Feb. 15, 1974.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum daily, 22.5°C Aug. 9, 14; minimum daily, 1.0°C Feb. 10, 12, 17.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)
FEB 26...	1030	23	114	7.0	3.0	13.6	1.3	2	8	29
MAR 19...	1315	106	112	7.3	4.0	14.5	1.4	2	<2	30
MAY 22...	1205	37	102	7.2	11.0	11.4	.9	17	5	28
JUL 11...	1015	19	100	7.3	18.5	9.1	1.5	--	--	28
AUG 02...	1015	19	100	7.3	21.5	8.8	1.4	24	22	28
SEP 27...	1145	18	101	7.2	17.5	9.6	1.2	E23	E350	28

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
FEB 26...	7.9	2.3	7.5	.7	20	0	16	13	12	.0
MAR 19...	8.0	2.4	8.3	.7	17	0	14	13	14	.1
MAY 22...	7.4	2.3	7.2	.7	17	0	14	13	12	.1
JUL 11...	7.4	2.3	6.4	.6	20	0	16	12	11	.1
AUG 02...	7.6	2.3	6.9	.6	22	0	18	12	10	.1
SEP 27...	7.6	2.2	5.8	.6	22	0	18	11	11	.1

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHATE, TOTAL (MG/L AS PO4)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
FEB 26...	5.4	64	<.00	<1.0	--	.40	.08	.08	3.1
MAR 19...	5.0	57	<1.0	<.10	--	.40	.03	.03	3.6
MAY 22...	4.0	64	<1.0	<.10	--	2.9	.02	<.01	--
JUL 11...	3.9	62	--	--	--	--	--	--	4.9
AUG 02...	3.9	73	<1.0	<.10	--	.60	.03	--	6.6
SEP 27...	4.2	61	<1.0	.20	.10	.30	.03	.03	1.6

01387000 WANAQUE RIVER AT WANAQUE, NJ--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	12.5	8.5	---	2.0	2.5	---	8.5	14.0	---	20.5	---
2	19.0	12.5	---	3.5	2.5	2.5	6.0	9.5	---	17.0	21.0	---
3	18.0	13.0	---	3.5	---	---	7.0	9.0	---	18.0	21.0	---
4	18.0	---	8.5	2.5	---	---	7.0	9.0	---	---	22.0	21.0
5	20.0	---	8.0	2.5	2.5	3.5	6.0	---	14.0	18.0	---	21.0
6	20.0	13.0	7.0	3.0	2.0	3.0	7.0	---	14.0	18.0	---	22.0
7	---	13.0	7.0	---	3.0	2.0	---	10.0	14.0	---	22.0	21.0
8	---	12.0	8.0	4.0	3.0	2.5	---	9.0	15.0	---	---	---
9	---	12.5	---	3.0	2.0	3.0	7.0	10.5	---	18.0	22.5	---
10	15.0	13.0	---	3.0	1.0	---	6.5	10.0	---	19.0	22.0	17.0
11	16.5	---	6.5	3.0	2.0	---	7.0	---	---	20.0	---	17.0
12	15.0	---	6.5	2.0	1.0	3.0	7.0	---	15.0	20.0	---	17.0
13	15.0	12.0	6.5	---	2.0	2.5	---	10.5	15.5	20.0	---	19.0
14	---	12.0	6.0	---	2.5	3.0	---	10.5	15.0	19.0	22.5	19.0
15	---	12.0	6.0	3.0	3.0	3.0	---	10.5	15.0	---	18.5	19.5
16	15.0	12.0	6.0	2.5	3.0	3.0	7.0	11.0	---	19.0	18.0	---
17	15.0	---	5.5	2.5	1.0	---	9.0	11.0	---	19.5	18.0	18.0
18	15.0	---	6.0	4.0	---	---	8.0	13.0	---	20.0	---	17.0
19	15.0	---	7.0	4.0	---	3.5	8.0	---	---	20.0	---	17.5
20	15.0	13.0	6.0	2.0	2.5	4.0	7.5	11.0	16.5	20.0	18.0	17.0
21	---	10.0	4.0	---	3.0	4.0	7.5	11.0	12.5	---	19.0	16.0
22	---	10.0	4.0	3.5	2.0	4.5	---	12.0	17.0	---	19.0	---
23	14.0	---	---	3.0	2.5	4.5	8.0	12.0	17.0	20.0	19.0	---
24	14.0	12.0	---	3.0	---	---	7.5	13.0	---	20.0	18.0	17.0
25	14.5	---	---	4.0	---	---	8.0	13.0	17.0	20.0	19.5	19.0
26	13.0	---	3.0	3.0	2.0	5.0	8.0	---	17.0	20.5	---	16.0
27	13.0	10.0	3.0	---	2.5	5.0	8.0	12.0	17.0	20.5	19.5	16.0
28	---	8.5	3.5	---	2.0	5.0	---	13.0	17.0	21.0	19.0	16.0
29	---	9.0	3.0	2.0	---	5.0	---	14.0	17.0	22.0	20.0	---
30	13.0	8.5	---	2.0	---	6.0	8.5	14.0	---	20.5	19.5	---
31	13.0	---	---	3.0	---	6.0	---	14.0	---	20.5	20.0	---
MEAN	15.5	11.5	6.0	3.0	2.0	3.5	7.5	11.0	15.5	19.5	20.0	18.0

WTR YR 1979 MEAN 11.0 MAX 22.5 MIN 1.0

01387450 MAHWAH RIVER NEAR SUFFERN, NY

LOCATION.--Lat 41°08'27", long 74°07'01", Rockland County, Hydrologic Unit 02030103, on left bank 13 ft (4 m) upstream from bridge on U.S. Highway 202, 2.5 mi (4.0 km) northeast of Suffern, and 4.8 mi (7.7 km) upstream from mouth.

DRAINAGE AREA.--12.3 mi² (31.9 km²).

PERIOD OF RECORD.--August 1958 to current year.

GAGE.--Water-stage recorder. Datum of gage is 321.57 ft (98.015 m) National Geodetic Vertical Datum of 1929. Prior to Nov. 18, 1976, water-stage recorder at site on right bank 13 ft (4 m) downstream, at present datum.

REMARKS.--Records fair except those below 20 ft³/s (0.57 m³/s), which are poor. Occasional regulation from unknown source.

AVERAGE DISCHARGE.--21 years, 24.9 ft³/s (0.705 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,840 ft³/s (52.1 m³/s) Nov. 8, 1977, gage height, 9.91 ft (3.021 m), from rating curve extended above 850 ft³/s (24.1 m³/s) on basis of contracted-opening measurements at gage heights 8.52 ft (2.597 m) and 9.91 ft (3.021 m); minimum, 0.05 ft³/s (0.001 m³/s) Oct. 20, 21, 1970, result of temporary pumping from gage pool.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 200 ft³/s (5.67 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 3	0030	206	5.83	3.76	1.146	Feb. 26	0915	411	11.6	4.66	1.420
Jan. 8	1315	400	11.3	4.62	1.408	Mar. 6	2115	492	13.9	4.94	1.506
Jan. 21	1015	565	16.0	5.17	1.576	May 25	1000	507	14.4	4.99	1.521
Jan. 25	0130	*780	22.1	*5.80	1.768	Sept. 6	1215	350	9.91	4.43	1.350

Minimum daily discharge, 1.7 ft³/s (0.05 m³/s) Aug. 10; minimum gage height 1.40 ft (0.427 m), Aug. 10.

REVISIONS.--The peak discharges and annual maximum (*) for water year 1977 have been revised as shown in the following table. They supersede figures published in the report for 1977.

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Feb. 25	0245	*853	24.2	6.01	1.832	Mar. 22	2200	786	22.3	5.82	1.774
Mar. 5	0100	356	10.1	4.45	1.356	Sept. 26	2230	416	11.8	4.68	1.426
Mar. 14	0215	328	9.29	4.34	1.323						

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.8	4.2	13	39	39	50	28	45	37	7.8	2.1	3.0
2	3.8	4.2	11	119	30	50	28	39	30	8.8	2.1	3.0
3	3.5	4.2	10	144	28	47	33	35	50	6.8	2.2	13
4	3.5	4.3	13	77	25	41	31	35	43	6.2	2.3	7.5
5	4.3	4.3	16	51	22	41	34	29	34	6.6	2.6	5.2
6	5.6	4.5	13	41	18	272	28	25	29	5.8	2.3	132
7	4.8	4.5	12	42	16	283	24	23	23	5.2	2.2	62
8	4.2	4.2	15	312	14	123	23	21	20	4.5	2.1	30
9	3.7	3.8	76	157	13	81	39	19	18	4.3	1.8	17
10	3.7	3.7	67	85	11	68	49	18	17	4.2	1.7	12
11	3.7	3.5	42	59	10	93	39	16	28	4.2	2.0	10
12	4.0	3.4	31	44	9.0	71	34	16	32	4.0	12	8.3
13	3.8	4.3	25	39	8.4	58	30	18	19	3.7	15	7.8
14	5.6	3.7	22	30	8.0	53	60	19	16	3.7	6.8	7.8
15	9.4	3.5	18	25	7.8	45	63	17	14	3.7	4.8	12
16	5.8	3.4	16	20	7.6	38	52	15	13	6.6	3.5	8.8
17	5.4	4.5	17	17	7.4	35	47	13	12	9.1	2.8	7.0
18	4.5	17	15	16	7.2	32	40	13	11	5.8	3.2	6.2
19	4.3	10	14	15	7.2	29	35	35	9.7	4.8	6.0	5.4
20	4.8	7.8	13	15	7.4	27	31	25	9.1	4.0	4.0	4.8
21	4.8	6.6	27	368	9.0	25	28	17	8.3	4.0	3.4	6.6
22	4.7	6.0	20	208	11	24	25	15	8.3	3.7	3.1	72
23	4.8	5.8	16	93	12	22	24	24	10	3.2	2.7	37
24	3.8	12	15	147	89	28	21	144	8.3	3.1	3.1	22
25	3.4	9.4	33	498	156	65	20	392	7.5	3.0	4.7	15
26	3.8	7.8	26	188	206	45	28	182	6.8	2.8	3.5	13
27	9.1	7.0	19	111	87	37	103	100	6.6	2.7	3.0	11
28	6.0	7.0	15	83	59	32	74	73	6.4	2.5	2.7	10
29	5.0	7.8	14	66	---	34	72	63	6.6	2.3	3.1	9.7
30	4.5	15	13	54	---	31	54	51	6.8	2.2	7.3	11
31	4.2	---	14	46	---	29	---	44	---	2.2	4.2	---
TOTAL	146.3	187.4	671	3209	925.0	1909	1197	1581	540.4	141.5	122.3	570.1
MEAN	4.72	6.25	21.6	104	33.0	61.6	39.9	51.0	18.0	4.56	3.95	19.0
MAX	9.4	17	76	498	206	283	103	392	50	9.1	15	132
MIN	3.4	3.4	10	15	7.2	22	20	13	6.4	2.2	1.7	3.0

CAL YR 1978 TOTAL 9772.4 MEAN 26.8 MAX 475 MIN 3.4
WTR YR 1979 TOTAL 11200.0 MEAN 30.7 MAX 498 MIN 1.7

01387500 RAMAPO RIVER NEAR MAHWAH, NJ

LOCATION.--Lat 41°05'51", long 74°09'48", Bergen County, Hydrologic Unit 02030103, on left bank 350 ft (107 m) downstream from State Highway 17, 0.6 mi (1.0 km) downstream from Mahwah River, and 1.0 mi (1.6 km) west of Mahwah. Water-quality samples collected at bridge 350 ft (107 m) upstream from gage at high flows.

DRAINAGE AREA.--118 mi² (306 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1902 to December 1906, September 1922 to current year (October 1902 to February 1905 monthly discharge only, published in WSP 1302). Figures of daily discharge Feb. 10, 1903, to Dec. 31, 1904, published in WSP 97, 125, are unreliable and should not be used.

REVISED RECORDS.--WSP 781: 1904(M). WSP 1031: 1938, 1940. WSP 1552: 1923(M), 1924, 1925-26(M), 1927-28, 1933, 1937. WRD-NJ 1971: 1968(M).

GAGE.--Water-stage recorder. Datum of gage is 253.10 ft (77.145 m) National Geodetic Vertical Datum of 1929. Prior to Dec. 31, 1906, nonrecording gage on former bridge at site 250 ft (76 m) downstream at different datum. Sept. 1, 1922 to Dec. 23, 1936, water-stage recorder just below former bridge at present datum.

REMARKS.--Water-discharge records fair. Diurnal fluctuations occasionally at low flow caused by powerplants above station.

AVERAGE DISCHARGE.--61 years (1902-06,1922-79), 230 ft³/s (6.514 m³/s), 26.50 in/yr (673 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 12,400 ft³/s (352 m³/s) Oct. 9, 1903, (gage height, 11.0 ft or 3.35 m, from graph based on gage readings, site and datum then in use) from rating curve extended above 1,400 ft³/s (39.6 m³/s); maximum gage height, 12.44 ft (3.792 m) Nov. 8, 1977; minimum discharge, 7 ft³/s (0.20 m³/s) Dec. 16, 1930, Sept. 12, 1932; minimum daily discharge, 8 ft³/s (0.23 m³/s) Aug. 25, 1929, Sept. 5, 12, 1932.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,400 ft³/s (39.6 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage Height (ft)	Gage Height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage Height (ft)	Gage Height (m)
Jan. 3	Unknown	1450	41.1	Unknown		Feb. 26	0830	1670	47.3	7.48	2.280
Jan. 8	Unknown	2000	56.6	Unknown		Mar. 7	0045	2740	77.6	8.66	2.640
Jan. 21	1900	2380	67.4	8.34	2.542	May 25	0845	2900	82.1	8.79	2.679
Jan. 25	0930	*4750	135	9.90	3.018	Sept. 6	2245	1960	55.5	7.88	2.402

Minimum discharge, 19 ft³/s (0.54 m³/s) Nov. 13, Aug. 2, gage height, 2.51 ft (0.765 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	24	63	200	497	541	309	427	351	85	21	34
2	23	23	55	500	409	534	306	376	301	73	19	34
3	23	23	50	1410	359	517	327	330	340	58	23	79
4	26	22	64	724	332	472	343	325	335	55	66	46
5	26	22	70	475	304	491	338	291	283	57	63	36
6	29	21	64	375	249	1500	304	256	247	49	51	1140
7	27	22	55	322	237	2340	276	233	212	44	34	1440
8	26	22	77	1550	233	1300	256	217	191	42	27	558
9	25	22	230	1600	219	855	338	203	177	38	24	312
10	23	22	482	808	203	705	472	189	167	37	23	214
11	23	22	291	543	203	903	398	183	228	37	27	171
12	23	21	240	402	187	791	338	165	325	36	128	141
13	23	20	213	380	183	600	304	177	212	33	199	121
14	34	22	203	457	175	554	459	187	175	45	122	126
15	29	24	150	430	173	484	607	181	152	40	78	169
16	27	48	145	335	167	378	501	157	138	41	54	122
17	27	65	140	230	156	348	465	141	126	87	42	97
18	26	97	134	218	152	327	418	143	114	65	42	82
19	23	72	124	188	152	306	354	283	102	58	52	73
20	23	62	110	167	157	283	314	259	94	48	44	63
21	22	55	134	1560	159	244	283	193	89	41	37	105
22	21	35	124	1690	173	233	261	161	87	37	32	475
23	22	38	90	817	173	223	242	214	79	33	31	373
24	22	65	88	859	444	259	226	938	73	31	38	226
25	24	48	250	4240	1100	636	210	2610	66	30	34	169
26	23	41	157	2470	1410	568	247	1860	62	30	33	145
27	36	38	120	1310	928	424	752	1070	58	27	30	131
28	27	41	98	953	575	373	668	743	55	25	28	114
29	25	41	76	765	---	367	656	593	55	24	42	110
30	24	72	77	640	---	357	517	472	63	24	52	131
31	24	---	79	561	---	327	---	409	---	23	44	---
TOTAL	779	1150	4253	27179	9709	18240	11489	13986	4957	1353	1540	7037
MEAN	25.1	38.3	137	877	347	588	383	451	165	43.6	49.7	235
MAX	36	97	482	4240	1410	2340	752	2610	351	87	199	1440
MIN	21	20	50	167	152	223	210	141	55	23	19	34
CFSM	.21	.32	1.16	7.43	2.94	4.98	3.25	3.82	1.40	.37	.42	1.99
IN	.25	.36	1.34	8.57	3.06	5.75	3.62	4.41	1.56	.43	.49	2.22

CAL YR 1978 TOTAL 86177 MEAN 236 MAX 2970 MIN 20 CFSM 2.00 IN 27.16
WTR YR 1979 TOTAL 101672 MEAN 279 MAX 4240 MIN 19 CFSM 2.36 IN 32.06

01387500 RAMAPO RIVER NEAR MAHWAH, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1963 to current year.

PERIOD OF DAILY RECORD.--
SUSPENDED-SEDIMENT DISCHARGE: February 1964 to June 1965.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
OCT 02...	1100	25	490	7.3	15.0	7.3	5.2	<20	<20	140	38
FEB 26...	1230	1550	157	7.2	.5	14.0	2.9	1600	540	31	8.3
MAR 19...	1030	306	250	7.5	5.0	13.3	2.3	22	7	66	18
MAY 22...	0915	167	275	7.6	15.5	9.0	.6	23	33	77	21
JUL 11...	1245	37	480	7.8	20.0	7.3	6.1	--	--	140	36
AUG 02...	1245	22	510	7.7	24.5	5.3	7.4	130	5	120	34
SEP 27...	0900	136	213	7.4	13.5	9.8	1.0	E920	E130	67	19

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT 02...	11	40	2.2	98	0	80	.0	28	76	.1
FEB 26...	2.4	20	.9	17	0	14	--	10	25	.1
MAR 19...	5.2	20	.9	49	0	40	--	17	35	.1
MAY 22...	6.0	23	1.2	63	0	52	--	18	36	.1
JUL 11...	11	36	1.8	120	0	98	--	20	69	.1
AUG 02...	9.1	43	2.4	110	0	90	--	27	77	.1
SEP 27...	4.8	17	1.0	56	0	46	--	16	31	.1

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHATE, TOTAL (MG/L AS PO4)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 02...	8.1	270	1.3	.70	2.7	3.4	4.7	.96	.71	3.1
FEB 26...	4.4	90	.00	.20	.30	.50	.50	.16	.09	5.5
MAR 19...	7.0	127	<1.0	.30	.40	.70	--	.20	.19	3.2
MAY 22...	7.3	166	<1.0	.20	.80	1.0	--	.23	.20	4.2
JUL 11...	7.7	280	--	--	--	--	--	--	--	8.0
AUG 02...	8.0	298	1.9	.50	.90	1.4	3.3	1.1	.82	7.8
SEP 27...	7.0	139	<1.0	.30	.20	.50	--	.20	.12	2.1

01387500 RAMAPO RIVER NEAR MAHWAH, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)
OCT 02...	1100	30	1	0	<10	12	650

DATE	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	PHENOLS (UG/L)
OCT 02...	230	<.5	9	0	50	0

01388000 RAMAPO RIVER AT POMPTON LAKES, NJ

LOCATION.--Lat 40°59'33", long 74°16'44", Passaic County, Hydrologic Unit 02030103, on right end of dam at pumping station in Pompton Lakes and 2.0 mi (3.2 km) upstream from mouth.

DRAINAGE AREA.--160 mi^2 (414 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1921 to current year.

REVISED RECORDS.--WSP 1552: 1922(M), 1924-25, 1929-31(M), 1934-35(M). WRD-NJ 1970: 1968-69.

GAGE.--Water-stage recorder and concrete dam. Datum of gage is 201.08 ft (61.289 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records good. Diversion by North Jersey Water Supply Commission to Wanaque Reservoir since December 1953, for municipal supply (records given herein). Slight regulation by Pompton Lake, capacity, 300,000,000 gal (1.136 hm^3).

AVERAGE DISCHARGE.--58 years, 302 ft^3/s (8.553 m^3/s), 25.64 in/yr (651 mm/yr), adjusted for diversion since Dec. 1, 1953.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,300 ft^3/s (348 m^3/s) Mar. 12, 1936 (gage height, 3.56 ft or 1.085 m), from rating curve extended above 7,000 ft^3/s (198 m^3/s) on basis of theoretical weir formula; maximum gage height, 4.40 ft (1.341 m) Oct. 16, 1955; practically no flow for several days in October, November 1922, August, September 1923, July 1927, and October 20, 1933.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,600 ft^3/s (45.3 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage Height (ft)	Gage Height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage Height (ft)	Gage Height (m)
Jan. 8	2045	2490	70.5	1.69	0.515	Mar. 7	0400	3380	95.7	2.04	0.622
Jan. 22	0030	2890	81.8	1.85	0.564	May 25	1615	3710	105	2.16	0.658
Jan. 25	1330	*5130	145	2.65	0.808	Sept. 7	0945	2120	60.0	1.53	0.466
Feb. 26	1330	2190	62.0	1.56	0.475						

Minimum discharge, 26 ft^3/s (0.74 m^3/s) Oct. 24, 25, Nov. 15, gage height, 0.10 ft (0.030 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35	35	90	256	614	767	396	599	519	104	35	60
2	35	30	77	599	505	704	396	505	443	133	35	54
3	35	30	71	1400	419	704	431	455	481	97	49	118
4	35	30	77	883	384	643	443	443	532	90	83	111
5	39	35	97	506	351	629	443	408	443	90	90	83
6	39	35	90	362	266	1630	408	362	396	83	71	1250
7	35	35	90	329	256	3150	362	329	329	71	65	1900
8	35	30	90	1840	247	1920	329	287	287	65	44	950
9	35	30	97	1920	237	1210	419	266	256	60	39	493
10	35	30	97	1000	210	967	629	247	247	60	35	340
11	30	30	115	614	200	1140	545	256	308	54	44	247
12	30	30	155	419	180	1090	455	228	493	54	157	209
13	30	30	115	373	170	849	408	247	351	54	308	191
14	44	30	87	493	160	751	571	256	256	97	209	209
15	49	30	61	431	150	673	816	266	218	104	133	256
16	39	39	61	308	140	518	704	228	191	77	97	218
17	35	71	61	200	135	467	599	191	174	104	77	165
18	35	157	61	157	130	431	558	182	165	104	71	133
19	35	111	56	90	130	396	467	408	141	83	90	133
20	30	90	67	83	135	373	419	455	133	77	83	111
21	30	77	71	1630	145	329	373	329	118	65	71	133
22	30	65	60	2300	155	297	340	256	118	60	60	658
23	30	60	60	1160	182	276	318	287	118	54	54	558
24	26	111	65	1050	396	297	297	1040	104	49	71	373
25	30	83	351	4380	1260	689	276	3280	97	49	77	276
26	30	60	165	3570	1900	783	297	2760	90	44	60	228
27	49	60	83	1880	1450	571	900	1630	83	44	54	200
28	44	54	71	1280	883	480	933	1100	90	39	49	174
29	35	60	77	1020	---	467	866	900	83	39	54	157
30	35	97	77	832	---	455	735	711	90	39	77	200
31	35	---	77	719	---	419	---	614	---	39	71	---
TOTAL	1089	1665	2872	32084	11390	24075	15133	19525	7354	2182	2513	10188
MEAN	35.1	55.5	92.6	1035	407	777	504	630	245	70.4	81.1	340
MAX	49	157	351	4380	1900	3150	933	3280	532	133	308	1900
MIN	26	30	56	83	130	276	276	182	83	39	35	54
(†)	0	0	78.2	137	0	0	0	0	0	0	0	0
MEAN‡	35.1	55.5	171	1172	407	777	504	630	245	70.4	81.1	340
CFSM‡	0.22	0.35	1.07	7.32	2.54	4.86	3.15	3.94	1.53	0.44	0.51	2.12
IN‡	0.25	0.39	1.23	8.45	2.65	5.60	3.52	4.54	1.71	0.51	0.58	2.37

CAL YR 1978 TOTAL 109941 MEAN 301 MAX 3270 MIN 26 MEAN‡ 307 CFSM‡ 1.92 IN‡ 26.06
WTR YR 1979 TOTAL 130070 MEAN 356 MAX 4380 MIN 26 MEAN‡ 374 CFSM‡ 2.34 IN‡ 31.75

† Diversion, in cubic feet per second, at station to Wanaque Reservoir for municipal supply. Records of diversion furnished by North Jersey District Water Supply Commission.
‡ Adjusted for diversion.

01388500 POMPTON RIVER AT POMPTON PLAINS, NJ

LOCATION.--Lat 40°58'09", long 74°16'56", Passaic County, Hydrologic Unit 02030103, 800 ft (240 m) below confluence of Pequannock and Ramapo Rivers, 100 ft (30 m) upstream from Jackson Avenue Bridge, and 0.7 mi (1.1 km) east of Pompton Plains.

DRAINAGE AREA.--355 mi² (919 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1903 to December 1904, May 1940 to current year. Monthly discharge only for some periods, published in WSP 1302.

REVISED RECORDS.--WSP 1202: 1945(M).

GAGE.--Water-stage recorder above concrete dam. Datum of gage is 160.12 ft (48.805 m) revised, National Geodetic Vertical Datum of 1929. March 1903 to December 1904, nonrecording gage on main spillway of dam 2,000 ft (610 m) upstream at different datum. May 1940 to September 1964 two water-stage recorders, each above a concrete dam about 2,000 ft (610 m) upstream at datum 14.34 ft (4.371 m) higher.

REMARKS.--Water-discharge records fair. No pumpage to or release from Point View Reservoir during the year. Water diverted from reservoirs on Pequannock and Wanaque Rivers for municipal supply (see Passaic River Basin, diversions). Flow regulated by Canistear, Oak Ridge, Clinton, Charlotteburg and Echo Lake Reservoirs on Pequannock River and by Greenwood Lake on Wanaque River (see Passaic River Basin, reservoirs in). Some diurnal fluctuations at low flow caused by powerplant on Wanaque River.

COOPERATION.--Gage-height record collected in cooperation with Passaic Valley Water Commission.

AVERAGE DISCHARGE.--40 years, (1903-04, 1940-79), 483 ft³/s (13.68 m³/s), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 28,340 ft³/s (803 m³/s) Oct. 10, 1903 (gage height, 14.3 ft or 4.36 m) site and datum then in use, by computation of peak flow over dam; no flow Aug. 18-20, 1904.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,200 ft³/s (90.6 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage Height (ft)	Gage Height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage Height (ft)	Gage Height (m)
Jan. 8	1700	3440	97.4	12.91	3.935	May 25	2030	7890	223	16.95	5.166
Jan. 23	2330	*9520	270	18.17	5.538	Sept. 6	1215	4430	125	13.91	4.240
Mar. 7	1115	5730	162	15.08	4.596						

Minimum discharge, 56 ft³/s (1.586 m³/s) Oct. 24, 25; gage height, 7.31 ft (2.228 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	86	65	172	367	830	1010	695	920	1050	118	73	112
2	83	62	152	1390	710	970	702	820	861	150	73	105
3	81	62	140	1710	575	946	764	750	908	121	101	209
4	89	62	159	1230	520	853	793	660	1000	107	167	170
5	96	67	191	745	471	815	778	640	808	109	130	222
6	93	63	172	537	365	2260	702	580	757	94	134	2630
7	93	67	155	505	401	5400	600	500	635	86	125	2640
8	82	65	188	2710	379	4180	455	450	503	80	99	1210
9	78	62	753	2560	351	2590	635	420	440	76	86	679
10	85	62	838	1310	328	1930	1070	380	401	75	85	487
11	81	62	440	892	320	2360	978	360	379	74	101	347
12	82	62	302	619	310	2130	800	350	372	73	365	301
13	77	61	243	586	303	1610	710	370	365	72	567	287
14	104	59	204	786	262	1390	1020	390	347	243	308	303
15	108	59	163	636	266	1250	1430	400	330	167	205	337
16	88	64	159	462	249	1020	1100	350	320	110	153	294
17	81	121	163	354	224	900	900	300	311	134	126	240
18	75	243	148	308	214	700	830	260	301	138	121	204
19	73	169	140	216	224	620	730	500	266	117	161	199
20	73	138	132	212	232	560	620	700	193	99	137	170
21	67	128	193	2610	232	510	560	500	143	89	122	230
22	65	110	154	3250	249	432	510	351	127	85	112	938
23	65	106	138	1730	262	386	480	455	133	77	104	734
24	58	220	145	2200	700	416	450	1670	99	76	127	535
25	56	157	517	7050	1530	1150	400	6700	113	74	138	394
26	61	124	315	5570	2480	1370	500	6750	104	70	113	328
27	103	113	202	2840	1710	1100	1250	4350	99	68	105	298
28	85	113	172	1740	1110	923	1400	2750	108	67	99	273
29	75	115	162	1300	---	861	1220	2070	112	70	108	258
30	68	179	159	1070	---	838	1050	1520	117	74	149	296
31	67	---	160	915	---	734	---	1250	---	73	129	---
TOTAL	2478	3040	7331	48410	15807	42214	24132	38466	11702	3066	4623	15430
MEAN	79.9	101	236	1562	565	1362	804	1241	390	98.9	149	514
MAX	108	243	838	7050	2480	5400	1430	6750	1050	243	567	2640
MIN	56	59	132	212	214	386	400	260	99	67	73	105

CAL YR 1978 TOTAL 199909 MEAN 548 MAX 7720 MIN 56
WTR YR 1979 TOTAL 216699 MEAN 594 MAX 7050 MIN 56

NOTE.--No gage-height record Apr. 16 to May 21.

01388600 POMPTON RIVER AT PACKANACK LAKE, NJ

LOCATION.--Lat 40°56'36", long 74°16'47", Morris County, Hydrologic Unit 02030103, at bridge on State Highway 504 in Packanack Lake, and 2.2 mi (3.3 km) downstream from confluence of Pequannock and Wanaque Rivers.

DRAINAGE AREA.--

WATER-QUALITY RECORDS

PERIOD OF RECORD.--February to September 1979.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
FEB 22...	1150	360	7.4	1.0	13.6	2.2	22	8	83	22
APR 04...	1020	195	7.3	7.5	12.4	2.2	170	32	55	15
JUN 07...	1125	195	7.6	19.0	9.4	2.2	350	130	58	16
JUL 17...	0935	300	7.5	24.5	5.7	4.0	920	1600	90	25
AUG 20...	1220	275	7.8	21.5	8.9	5.0	920	79	78	22

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
FEB 22...	6.8	32	1.2	66	0	54	--	22	53	.1
APR 04...	4.2	14	.9	39	0	32	--	17	26	.0
JUN 07...	4.4	13	.9	49	0	40	.0	16	23	.1
JUL 17...	6.8	20	1.7	73	0	60	--	22	34	.1
AUG 20...	5.7	19	1.6	66	0	54	--	21	32	.1

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHATE, TOTAL (MG/L AS PO4)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
FEB 22...	9.8	193	1.2	.60	.60	1.2	2.4	.35	.35	3.8
APR 04...	5.9	102	<1.0	<.10	--	.50	--	.12	.07	3.1
JUN 07...	7.4	117	.60	.19	1.8	2.0	2.6	.17	.17	4.3
JUL 17...	6.0	177	1.0	.50	1.8	2.3	3.3	.46	.46	5.0
AUG 20...	7.0	166	1.1	.60	.10	.70	1.8	.28	<.01	5.0

DATE	TIME	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	BORON, TOTAL RECOV-ERABLE (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)
JUN 07...	1125	40	2	0	20	0	20	5

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	PHENOLS (UG/L)
JUN 07...	400	8	80	<.5	9	0	10	1

01389000 POMPTON RIVER AT TWO BRIDGES, NJ

LOCATION.--Lat 40°53'52", long 74°16'22", Passaic County, Hydrologic Unit 02030103, at bridge on Two Bridges Road in Two Bridges, 20 ft (6 m) upstream from mouth.

DRAINAGE AREA.--372 mi^2 (963 km^2).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1963 to 1979 (discontinued).

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: June 1969 to September 1974.
pH: June 1969 to September 1974.
WATER TEMPERATURES: October 1962 to September 1974.
DISSOLVED OXYGEN: June 1969 to September 1974.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
OCT										
02...	1315	325	7.3	17.5	8.3	3.3	16000	220	100	28

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT										
02...	7.6	21	2.0	71	0	58	.0	26	35	.1

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHATE, TOTAL (MG/L AS PO4)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT										
02...	7.2	179	1.4	.30	2.3	2.6	4.0	.65	.42	4.5

DATE	TIME	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)
OCT							
02...	1315	30	1	0	10	5	510

DATE	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	PHENOLS (UG/L)
OCT						
02...	140	<.5	5	0	50	0

01389110 PASSAIC RIVER AT RT. 46 AT SINGAC, NJ

LOCATION.--Lat 40°53'32", long 74°15'58", Passaic County, Hydrologic Unit 02030103, at bridge on U.S. Route 46 at Singac, and 0.6 mi (1.0 km) downstream from Pompton River.

DRAINAGE AREA.--745 mi^2 (1,930 km^2).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1974 to current year.

REMARKS.--Operated as part of the USGS-EPA paired station network. Instantaneous water discharge estimated on the basis of water discharge for 01389500 Passaic River at Little Falls, drainage area relationships, and known diversions.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	TURBIDITY (NTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)
OCT											
03...	1010	E240	540	7.4	16.5	6	--	4.3	18	--	780
24...	1100	E200	590	--	12.5	7	--	4.7	38	--	290
NOV											
02...	1100	E230	495	7.3	11.0	5	--	5.6	41	--	77
14...	1030	E200	582	7.6	10.5	8	--	4.6	32	--	1900
DEC											
06...	1130	E740	335	7.4	6.0	10	--	8.7	--	39	230
13...	1100	E1400	255	7.1	1.0	8	--	10.2	--	25	210
28...	1305	E1100	274	7.1	1.5	10	--	11.0	--	36	110
JAN											
10...	1340	E4100	214	7.0	.0	10	--	11.8	--	15	1600
30...	1200	E6300	165	7.1	1.5	10	--	11.7	--	24	450
FEB											
12...	1130	E670	352	7.3	1.0	4	--	14.1	--	60	48
28...	1130	E4900	178	7.0	.0	14	--	12.4	--	17	420
MAR											
14...	1100	E4000	184	7.0	6.0	4	--	11.8	--	17	--
26...	1320	E2300	225	7.5	9.0	--	6.0	10.0	--	19	350
APR											
11...	1325	E2100	220	7.4	8.5	--	10	11.0	--	25	510
24...	1325	E930	290	7.4	15.5	--	7.0	8.1	--	17	80
MAY											
09...	1255	E850	295	7.3	19.0	--	10	7.2	--	21	K100
24...	1205	E2200	245	7.3	16.5	--	15	6.2	--	23	3100
JUN											
05...	1215	E2500	220	7.3	19.0	--	7.0	8.1	--	16	K47000
19...	0945	E790	305	7.3	22.0	--	8.0	5.2	--	23	1100
JUL											
05...	1130	E380	406	7.6	20.0	--	10	4.7	--	26	830
16...	1450	E310	475	7.6	26.5	--	8.0	5.3	--	20	900
AUG											
01...	1345	E260	485	7.6	26.5	--	6.0	5.7	--	40	700
15...	1335	E870	295	7.3	19.0	--	20	4.7	--	20	--
27...	1235	E320	440	7.5	25.0	--	8.0	5.7	--	17	830
SEP											
13...	1340	E1600	238	7.2	18.5	--	15	4.8	--	34	17
24...	1625	E1700	208	7.2	15.5	--	20	6.1	--	32	--

01389110 PASSAIC RIVER AT RT. 46 AT SINGAC, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	STREP-TOCOCCI FECAL KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)	CALCIUM TOTAL RECOV-ERABLE (MG/L AS CA)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, TOTAL RECOV-ERABLE (MG/L AS MG)	MAGNE-SIUM, SUS-PENDED TOTAL (MG/L AS MG)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, TOTAL RECOV-ERABLE (MG/L AS NA)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, TOTAL RECOV-ERABLE (MG/L AS K)
OCT										
03...	84	120	--	33	--	--	10	--	46	--
24...	40	--	--	--	--	--	--	--	--	--
NOV										
02...	74	--	--	--	--	--	--	--	--	--
14...	160	--	--	--	--	--	--	--	--	--
DEC										
06...	78	--	--	--	--	--	--	--	--	--
13...	270	65	16	16	6.1	--	6.1	21	21	2.6
28...	280	--	--	--	--	--	--	--	--	--
JAN										
10...	530	--	--	--	--	--	--	--	--	--
30...	4000	--	--	--	--	--	--	--	--	--
FEB										
12...	--	--	--	--	--	--	--	--	--	--
28...	490	--	--	--	--	--	--	--	--	--
MAR										
14...	43	49	--	13	3.9	--	3.9	15	15	1.5
26...	52	--	--	--	--	--	--	--	--	--
APR										
11...	130	--	--	--	--	--	--	--	--	--
24...	K36	--	--	--	--	--	--	--	--	--
MAY										
09...	--	--	--	--	--	--	--	--	--	--
24...	K3400	--	--	--	--	--	--	--	--	--
JUN										
05...	K230	64	--	17	5.3	.1	5.2	15	15	1.7
19...	K110	--	--	--	--	--	--	--	--	--
JUL										
05...	210	--	--	--	--	--	--	--	--	--
16...	61	--	--	--	--	--	--	--	--	--
AUG										
01...	68	--	--	--	--	--	--	--	--	--
15...	470	--	--	--	--	--	--	--	--	--
27...	68	--	--	--	--	--	--	--	--	--
SEP										
13...	530	66	18	18	5.7	.5	5.2	17	17	2.4
24...	--	--	--	--	--	--	--	--	--	--

DATE	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SEDI-MENT, SUS-PENDED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)
OCT										
03...	4.8	110	0	90	47	64	302	21	3.8	1.7
24...	--	--	0	--	--	--	322	32	2.5	3.3
NOV										
02...	--	95	0	78	--	--	273	20	2.4	2.9
14...	--	140	0	115	--	--	301	17	2.1	3.8
DEC										
06...	--	78	0	64	--	--	211	25	1.2	1.4
13...	2.6	44	0	36	31	29	156	17	1.1	.72
28...	--	51	0	42	--	--	149	14	1.1	1.2
JAN										
10...	--	29	0	24	--	--	122	82	.47	.28
30...	--	--	--	--	--	--	91	15	.51	.19
FEB										
12...	--	--	--	--	--	--	194	8	.99	1.4
28...	--	--	--	--	--	--	109	33	.53	.26
MAR										
14...	1.2	32	0	26	18	25	119	9	.56	.27
26...	--	--	--	--	--	--	131	94	.55	.53
APR										
11...	--	--	--	--	--	--	117	99	--	--
24...	--	--	--	--	--	--	160	25	.77	1.1
MAY										
09...	--	--	--	--	--	--	161	35	.92	.95
24...	--	--	--	--	--	--	142	--	.91	.55
JUN										
05...	1.6	56	0	46	18	24	41	24	.68	.32
19...	--	--	--	--	--	--	171	26	1.2	1.0
JUL										
05...	--	--	--	--	--	--	236	24	1.7	1.5
16...	--	--	--	--	--	--	281	26	1.5	1.8
AUG										
01...	--	--	--	--	--	--	269	21	1.6	2.1
15...	--	--	--	--	--	--	169	58	1.3	.70
27...	--	--	--	--	--	--	234	23	1.6	1.8
SEP										
13...	2.4	63	0	52	21	24	141	46	.73	.49
24...	--	--	--	--	--	--	120	43	1.3	.42

01389110 PASSAIC RIVER AT RT. 46 AT SINGAC, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN,AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHATE, TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)	ARSENIC TOTAL (UG/L AS AS)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
OCT										
03...	1.3	3.0	6.8	.90	--	6.9	1	--	<10	9
24...	.70	4.0	6.5	1.1	--	8.9	1	--	10	12
NOV										
02...	.70	3.6	6.0	1.1	--	6.8	1	--	10	10
14...	.80	4.6	6.7	1.1	--	6.6	1	--	20	10
DEC										
06...	.50	1.9	3.1	.61	--	7.7	2	--	<10	12
13...	.78	1.5	2.6	.31	--	9.2	1	--	<10	12
28...	.70	1.9	3.0	.36	--	7.6	1	0	10	8
JAN										
10...	.53	.81	1.3	.20	--	4.8	1	--	10	12
30...	.33	.52	1.0	.09	--	4.2	1	--	<10	5
FEB										
12...	.80	2.2	3.2	.35	--	3.0	0	0	<10	6
28...	.58	.84	1.4	.11	--	4.4	1	0	20	8
MAR										
14...	.44	.71	1.3	.09	--	5.2	1	0	<10	6
26...	.35	.88	1.4	.15	--	5.3	2	1	10	6
APR										
11...	--	--	--	--	--	--	3	1	10	7
24...	.80	1.9	2.7	.38	1.2	3.4	3	0	10	10
MAY										
09...	.75	1.7	2.6	.34	1.0	6.0	1	0	10	11
24...	.65	1.2	2.1	.26	.80	6.9	2	0	30	13
JUN										
05...	.59	.91	1.6	.25	.77	12	2	0	20	10
19...	.80	1.8	3.0	.38	1.2	8.1	3	1	10	12
JUL										
05...	1.0	2.5	4.2	.60	1.8	8.4	1	0	30	10
16...	1.8	3.6	5.1	.88	--	5.1	1	0	20	13
AUG										
01...	1.1	3.2	4.8	.72	--	6.9	1	0	20	10
15...	1.0	1.7	3.0	.45	--	13	2	0	20	13
27...	.90	2.7	4.3	.58	--	6.5	2	1	20	9
SEP										
13...	1.2	1.7	2.4	.42	--	9.8	3	0	10	17
24...	.45	.87	2.2	.32	--	4.9	--	1	10	17

DATE	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	OIL AND GREASE (MG/L)	OIL AND GREASE, TOTAL RECOV. GRAVIMETRIC (MG/L)	CHLOROPHYLL A PHYTOPLANKTON, UNCORR. (UG/L)	CHLOROPHYLL B PHYTOPLANKTON, UNCORR. (UG/L)	CHLOR-A PHYTOPLANKTON CHROMO FLUOROM (UG/L)	CHLOR-B PHYTOPLANKTON CHROMO FLUOROM (UG/L)
OCT										
03...	1200	--	<.5	40	0	--	6.46	.284	--	--
24...	920	--	<.5	10	0	--	2.43	.245	--	--
NOV										
02...	1000	--	1.8	40	0	--	--	--	3.00	.000
14...	1000	--	1.4	30	0	--	--	--	3.28	.000
DEC										
06...	1100	--	<.5	50	--	0	--	--	4.35	.000
13...	1300	--	<.5	70	--	0	--	--	1.47	.000
28...	870	--	.2	110	--	1	--	--	.000	.000
JAN										
10...	1200	--	--	80	--	0	--	--	2.15	.000
30...	730	--	--	40	--	0	--	--	.050	.000
FEB										
12...	470	3	--	60	--	0	--	--	1.76	.000
28...	1100	8	--	30	--	0	--	--	.000	.000
MAR										
14...	240	10	--	40	--	1	--	--	1.30	.000
26...	680	11	<.5	40	--	0	--	--	4.72	.000
APR										
11...	710	11	.5	40	--	1	--	--	7.56	.000
24...	1300	10	.5	110	--	0	--	--	9.64	.000
MAY										
09...	1300	8	.5	50	--	0	--	--	7.12	.000
24...	1800	11	<.5	20	--	130	--	--	3.74	.000
JUN										
05...	1100	9	<.5	60	--	2	--	--	5.02	.000
19...	1200	16	<.5	40	--	0	--	--	6.80	.000
JUL										
05...	1100	14	<.5	30	--	2	--	--	8.75	.000
16...	1000	10	<.5	60	--	0	--	--	19.9	1.07
AUG										
01...	1000	13	<.5	20	--	0	--	--	24.7	.000
15...	2100	13	<.5	40	--	0	--	--	4.22	.000
27...	910	14	<.5	20	--	0	--	--	10.7	1.25
SEP										
13...	1600	13	<.5	30	--	1	--	--	6.19	.000
24...	1900	17	--	20	--	0	--	--	3.24	.000

01389500 PASSAIC RIVER AT LITTLE FALLS, NJ

LOCATION.--Lat 40°53'05", long 74°13'35", Passaic County, Hydrologic Unit 02030103, on left bank 0.6 mi (1.0 km) downstream from Beattie's Dam in Little Falls, and 1.0 mi (1.6 km) upstream from Peckman River. Daily dissolved oxygen and water temperature data collected 0.5 mi (0.8 km) upstream from gaging station.

DRAINAGE AREA.--762 mi² (1,974 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1897 to current year. Monthly discharge only for September 1897, published in WSP 1302. Published as "at Paterson" September 1897 to September 1955.

GAGE.--Water-stage recorder. Datum of gage is 120.00 ft (36.576 m) National Geodetic Vertical Datum of 1929 (levels by Passaic Valley Water Commission). Prior to Jan. 8, 1933, nonrecording gage and Jan. 8, 1933, to Sept. 30, 1955, water-stage recorder, at site 3.7 mi (6.0 km) downstream, National Geodetic Vertical Datum of 1929 (levels from New Jersey Geological Survey bench mark).

REMARKS.--Water-discharge records good. Diurnal fluctuation at medium and low flow caused by hydroelectric plant at Beattie's Dam. Flow regulated by reservoirs in Rockaway, Pequannock, Wanaque, and Pompton River Basin (see Passaic River Basin, reservoirs in). Large diversions for municipal supply from Passaic River above Beattie's Dam, and from Rockaway, Pequannock, and Wanaque Rivers (see Passaic River Basin, diversions). In addition, the Commonwealth Water Co., diverts from Canoe Brook near Summit and from Passaic River (see Passaic River Basin, diversions); that company and the city of East Orange also divert water for municipal supply by pumping wells.

COOPERATION.--Gage-height record collected in cooperation with the Passaic Valley Water Commission.

AVERAGE DISCHARGE.--82 years, 1,169 ft³/s (33.11 m³/s), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 28,000 ft³/s (793 m³/s) Oct. 10, 1903; no flow July 3-5, 1904, July 16, 23, 1905.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 4,400 ft³/s (125 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage Height (ft)	Gage Height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage Height (ft)	Gage Height (m)
Jan. 9	0430	4580	130	5.95	1.814	Mar. 8	1800	6910	196	7.48	2.280
Jan. 27	1145	*10200	289	9.21	2.807	May 26	2000	7300	207	7.71	2.350
Feb. 27	2200	5130	145	6.34	1.932						

Minimum discharge, 48 ft³/s (1.36 m³/s) Oct. 20, gage height, 0.32 ft (0.098 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	176	173	657	732	4390	4870	1370	2360	3660	333	171	206
2	189	168	566	1570	3450	4520	1320	2050	3110	403	153	184
3	176	163	476	2710	2870	4160	1410	1690	2710	342	251	374
4	176	158	502	2580	2400	3740	1500	1460	2670	285	398	417
5	200	160	657	2090	1940	3360	1560	1290	2430	317	333	233
6	240	155	657	1830	1410	3830	1520	1090	2190	270	285	2630
7	244	153	533	1720	1160	5560	1420	954	1900	226	408	3870
8	213	153	555	3850	987	6730	1210	855	1560	219	293	3420
9	160	150	1520	4500	920	6550	1330	792	1350	206	187	2930
10	158	148	2060	4120	774	5760	1870	750	1110	171	158	2620
11	171	148	1790	3870	634	5370	2010	824	1140	195	195	2270
12	176	148	1520	3460	622	5090	1910	697	1650	166	703	1910
13	158	120	1370	3190	628	4520	1740	720	1700	173	1270	1560
14	184	140	1200	3090	628	3990	1910	792	1540	266	1090	1210
15	251	148	967	2710	617	3570	2440	849	1340	451	830	1010
16	198	153	720	2330	544	3080	2570	792	1100	277	523	805
17	171	240	646	1910	491	2630	2450	685	881	337	380	577
18	168	600	566	1520	461	2270	2300	600	750	398	259	451
19	163	640	496	1060	436	1950	2020	1210	726	466	346	412
20	133	486	446	792	389	1650	1710	1480	594	346	333	380
21	133	389	744	3420	446	1410	1410	1290	486	262	259	417
22	140	297	894	5120	486	1190	1190	1090	436	219	223	1800
23	158	274	780	5090	549	1040	1040	1110	427	206	209	1860
24	135	594	657	5550	1040	1010	920	2570	431	166	248	1650
25	130	605	1370	8120	2600	1570	849	5070	374	171	346	1510
26	138	461	1410	9910	3950	2230	855	6960	309	168	293	1380
27	251	368	1200	10200	4930	2170	1810	7280	266	168	248	1210
28	297	337	1020	9100	4990	1920	2480	6680	259	163	206	1020
29	244	342	817	7540	---	1730	2740	5760	277	153	209	887
30	200	566	668	6270	---	1640	2650	4930	293	181	266	862
31	176	---	544	5260	---	1500	---	4250	---	187	270	---
TOTAL	5707	8637	28008	125214	44742	100610	51514	68930	37669	7891	11343	40065
MEAN	184	288	903	4039	1598	3245	1717	2224	1256	255	366	1336
MAX	297	640	2060	10200	4990	6730	2740	7280	3660	466	1270	3870
MIN	130	120	446	732	389	1010	849	600	259	153	153	184

CAL YR 1978 TOTAL 463359 MEAN 1269 MAX 9980 MIN 120
WTR YR 1979 TOTAL 530330 MEAN 1453 MAX 10200 MIN 120

01389500 PASSAIC RIVER AT LITTLE FALLS, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1963 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1962 to current year.
DISSOLVED OXYGEN: October 1970 to current year.
SUSPENDED-SEDIMENT DISCHARGE: August 1963 to July 1965.

COOPERATION.--Once daily dissolved-oxygen and water-temperature records provided by the Passaic Valley Water Commission. Selected analyses of fecal coliform and fecal streptococci by the MPN method, and selected water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum daily, 28.5°C July 21, 22, 1963 and July 19, 1968; minimum daily, 0.0°C on many days during winter months.
DISSOLVED OXYGEN: Maximum daily, 14.4 mg/L Jan. 7, 1973; minimum daily, 1.7 mg/L June 23, 1976.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum daily, 27.0°C Aug. 3-6; minimum daily, 0.0°C on several days during winter months.
DISSOLVED OXYGEN: Maximum daily, 13.2 mg/L Jan. 9; minimum daily, 2.2 mg/L Aug. 31.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (NTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
OCT											
03...	1330	173	500	7.5	16.5	--	4.9	6.4	--	--	--
30...	1250	198	--	--	12.5	--	--	--	--	--	--
FEB											
27...	1110	4920	197	7.0	1.0	--	14.3	3.4	9200	--	--
MAR											
27...	1100	2180	215	7.7	7.5	--	11.7	--	350	--	--
APR											
12...	1255	1910	229	7.7	11.0	8.0	10.4	3.2	--	--	56
MAY											
30...	1055	4950	168	7.4	18.0	4.0	8.3	1.8	170	--	--
JUN											
18...	1325	744	288	7.5	23.5	10	5.4	6.1	--	3100	96
JUL											
12...	1050	163	430	7.8	23.5	4.0	4.3	--	--	360	--
AUG											
08...	1210	289	370	8.0	25.0	15	7.4	5.2	>2400	400	88
SEP											
25...	1015	1520	208	7.4	15.0	20	8.7	4.6	9200	7800	500

DATE	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)
OCT											
03...	--	120	33	9.8	42	3.9	--	--	89	.0	43
30...	--	--	--	--	--	--	--	--	--	--	--
FEB											
27...	2400	37	9.9	3.0	19	1.2	24	0	20	--	13
MAR											
27...	9	56	15	4.6	16	1.3	44	0	36	--	19
APR											
12...	--	61	16	5.2	17	1.4	--	--	35	--	20
MAY											
30...	<20	45	12	3.7	11	1.3	49	0	40	.0	16
JUN											
18...	--	79	21	6.4	20	2.0	--	--	43	--	24
JUL											
12...	--	120	31	9.4	32	3.1	107	0	88	--	32
AUG											
08...	1600	96	26	7.6	26	2.9	90	0	74	--	30
SEP											
25...	790	59	16	4.6	13	2.1	--	--	31	.0	21

01389500 PASSAIC RIVER AT LITTLE FALLS, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	BARIUM, SUSPENDED RECOVERABLE (UG/L AS BA)	BARIUM, DISSOLVED (UG/L AS BA)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM SUSPENDED RECOVERABLE (UG/L AS CD)
OCT 03...	1330	100	1	--	--	--	--	0	--	--	--
MAY 30...	1055	100	3	2	30	0	30	--	40	0	0
AUG 08...	1210	--	3	1	100	70	30	--	--	7	7
SEP 25...	1015	40	1	--	--	--	--	0	--	1	--

DATE	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, SUSPENDED RECOV. (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COBALT, SUSPENDED RECOVERABLE (UG/L AS CO)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, SUSPENDED RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)
OCT 03...	--	<10	--	--	--	--	--	10	--	--	1100
MAY 30...	0	20	0	20	1	1	0	9	5	4	720
AUG 08...	0	<10	0	<10	2	2	0	8	5	3	1100
SEP 25...	--	10	--	--	--	--	--	15	--	--	2000

DATE	IRON, SUSPENDED RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, SUSPENDED RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, SUSPENDED RECOV. (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY SUSPENDED RECOVERABLE (UG/L AS HG)	MERCURY DISSOLVED (UG/L AS HG)
OCT 03...	--	--	--	--	--	160	--	--	<.5	--	--
MAY 30...	540	180	6	6	0	40	0	40	<.5	.0	<.5
AUG 08...	1100	20	13	13	0	170	70	100	<.5	<.0	<.5
SEP 25...	--	--	13	--	--	130	--	--	<.5	--	--

DATE	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, SUSPENDED TOTAL (UG/L AS SE)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	SILVER, SUSPENDED RECOVERABLE (UG/L AS AG)	SILVER, DISSOLVED (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, SUSPENDED RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)
OCT 03...	16	0	--	--	--	--	--	20	--	--
MAY 30...	--	0	0	0	0	0	0	70	60	10
AUG 08...	--	0	0	0	0	0	0	40	30	8
SEP 25...	5	0	--	--	--	--	--	20	--	--

01389500 PASSAIC RIVER AT LITTLE FALLS, NJ--Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, OCTOBER 1978 TO SEPTEMBER 1979

DATE	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)
OCT 03...	56	.2	13	285	--	--	--	2.8	1.9	2.6	4.5
30...	--	--	--	--	14	7.5	--	--	--	--	--
FEB 27...	31	.1	5.5	109	30	399	--	1.0	.40	.20	.60
MAR 27...	28	.1	7.5	124	105	618	--	1.0	.50	1.2	1.7
APR 12...	27	.1	7.8	127	99	511	--	--	--	--	--
MAY 30...	17	.1	7.9	98	13	174	77	.42	.18	1.2	1.4
JUN 18...	32	.1	11	166	25	50	88	1.2	.78	.62	1.4
JUL 12...	50	.2	11	264	18	7.9	82	2.1	1.7	1.3	3.0
AUG 08...	39	.1	12	206	32	25	93	1.7	1.2	1.2	2.4
SEP 25...	22	.1	9.8	121	38	156	85	1.3	.38	.53	.91

DATE	NITRO-GEN,NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHATE, TOTAL (MG/L AS PO4)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)
OCT 03...	--	--	7.3	--	2.4	--	1.9	7.7	--	--
30...	--	--	--	--	--	--	--	--	--	--
FEB 27...	--	--	1.6	--	.18	--	.18	4.6	--	--
MAR 27...	--	--	2.7	--	.45	--	.32	5.0	--	--
APR 12...	--	--	--	--	--	--	--	--	--	--
MAY 30...	.72	.68	1.8	.15	.46	.11	.46	--	7.1	3.3
JUN 18...	.20	1.2	2.6	.34	1.0	.15	--	7.6	--	--
JUL 12...	.50	2.5	5.1	.55	--	.36	--	12	--	--
AUG 08...	.20	2.2	4.1	.59	1.2	.40	1.1	--	5.2	1.5
SEP 25...	.08	.83	2.2	.35	1.0	.15	.52	9.1	--	--

01389500 PASSAIC RIVER AT LITTLE FALLS, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	PHENOLS (UG/L)
OCT 03...	1330	0
MAY 30...	1055	0
SEP 25...	1015	4

DATE	LENGTH OF EXPO- SURE (DAYS)	PERI- PHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	PERI- PHYTON BIOMASS ASH WEIGHT G/SQ M	CHLOR-A PERI- PHYTON CHROMO- GRAPHIC FLUOROM (MG/M2)	CHLOR-B PERI- PHYTON CHROMO- GRAPHIC FLUOROM (MG/M2)
MAY 30...	47	2.13	1.57	22.4	7.44
AUG 08...	26	5.28	3.23	18.1	5.25

01389500 PASSAIC RIVER AT LITTLE FALLS, NJ--Continued

PHYTOPLANKTON ANALYSES, OCTOBER 1978 TO SEPTEMBER 1979

DATE	MAY 30,79	JUN 18,79	JUL 12,79	AUG 8,79	SEP 25,79
TIME	1055	1325	1050	1210	1015
TOTAL CELLS/ML	5300	8100	17000	22000	2100
DIVERSITY: DIVISION	0.6	0.8	1.5	1.2	1.5
.CLASS	0.6	0.8	1.5	1.2	1.5
..ORDER	0.7	1.0	1.6	1.5	1.8
...FAMILY	0.8	1.1	2.2	2.6	2.0
....GENUS	0.9	2.3	2.4	2.8	2.6

ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
CHLOROPHYTA (GREEN ALGAE)										
.CHLOROPHYCEAE										
..CHLOROCOCCALES										
...CHARACIACEAE										
....SCHROEDERIA	--	-	--	-	•	0	--	-	--	-
...CHLOROCOCCACEAE										
....CHLOROCOCCUM	--	-	--	-	--	-	--	-	77	4
...COELASTRACEAE										
....COELASTRUM	--	-	--	-	--	-	1600	7	--	-
...MICRACTINIACEAE										
....GOLENKINIA	--	-	--	-	170	1	--	-	39	2
....MICRACTINIUM	--	-	--	-	4500°	25	1400	7	--	-
...OOCYSTACEAE										
....ANKISTRODESMUS	39	1	100	1	170	1	760	3	--	-
....CHODATELLA	•	0	--	-	--	-	--	-	--	-
....KIRCHNERIELLA	--	-	--	-	--	-	410	2	--	-
....OOCYSTIS	--	-	--	-	170	1	340	2	--	-
....SELENASTRUM	--	-	--	-	•	0	--	-	--	-
...SCENEDESMACEAE										
....SCENEDESMUS	150	3	910	11	1500	9	10000°	48	150	7
....TETRASTRUM	--	-	--	-	690	4	--	-	--	-
..VOLVOCALES										
...CHLAMYDOMONADACEAE										
....CHLAMYDOMONAS	--	-	200	2	260	1	270	1	77	4
CHRYSOPHYTA										
.BACILLARIOPHYCEAE										
..CENTRALES										
...COSCINODISCACEAE										
....CYCLOTELLA	77	1	2300°	28	1800	10	2200	10	120	6
....MELOSIRA	--	-	3000°	36	170	1	620	3	620°	30
....STEPHANODISCUS	100	2	1300°	16	--	-	--	-	--	-
..PENNALES										
...ACHNANTHACEAE										
....RHOICOSPHENIA	--	-	--	-	--	-	•	0	--	-
...FRAGILARIACEAE										
....ASTERIONELLA	90	2	--	-	--	-	--	-	--	-
....SYNEDRA	•	0	--	-	--	-	210	1	--	-
...GOMPHONEMATACEAE										
....GOMPHONEMA	--	-	--	-	--	-	140	1	--	-
...NAVICULACEAE										
....NAVICULA	•	0	50	1	--	-	270	1	--	-
...NITZSCHIACEAE										
....NITZSCHIA	39	1	50	1	340	2	760	3	39	2
...SURIRELLACEAE										
....SURIRELLA	--	-	--	-	--	-	•	0	--	-
...TABELLARIACEAE										
....TABELLARIA	77	1	--	-	--	-	--	-	--	-
CRYPTOPHYTA (CRYPTOMONADS)										
.CRYPTOPHYCEAE										
..CRYPTOMONADALES										
...CRYPTOMONADACEAE										
....CRYPTOMONAS	--	-	50	1	•	0	--	-	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)										
.CYANOPHYCEAE										
..CHROOCOCCALES										
...CHROOCOCCACEAE										
....ANACYSTIS	--	-	200	2	7500°	43	--	-	39	2
..HORMOGONALES										
...NOSTOCACEAE										
....ANABAENA	--	-	--	-	--	-	550	3	620°	30
....APHANIZOMENON	--	-	--	-	--	-	--	-	310	15
...OSCILLATORIACEAE										
....OSCILLATORIA	4600°	88	--	-	--	-	1400	6	--	-
EUGLENOPHYTA (EUGLENOIDS)										
.EUGLENOPHYCEAE										
..EUGLENALES										
...EUGLENACEAE										
....EUGLENA	--	-	--	-	--	-	•	0	--	-
....TRACHELOMONAS	--	-	--	-	--	-	•	0	--	-

NOTE: ° - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
• - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

01389500 PASSAIC RIVER AT LITTLE FALLS, NJ--Continued

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.2	5.4	9.4	10.2	11.7	12.0	9.3	8.0	6.3	4.4	3.9	3.3
2	5.3	6.0	10.0	10.5	11.8	11.5	9.0	7.9	5.8	3.8	3.7	3.7
3	5.4	5.5	9.6	11.4	11.5	11.3	8.8	7.8	5.8	4.2	3.8	4.1
4	5.3	4.9	10.8	12.6	11.5	10.5	9.7	6.8	6.3	3.9	2.8	6.4
5	4.9	5.0	9.0	12.0	11.2	10.8	9.6	7.0	5.9	3.9	3.0	3.8
6	5.6	5.2	8.3	12.0	11.7	10.5	9.9	7.9	6.2	4.2	4.4	5.9
7	5.4	4.8	8.8	12.0	11.5	11.2	9.8	7.4	5.8	4.5	3.0	6.3
8	5.4	4.8	9.0	12.0	12.0	11.5	10.0	6.6	5.5	4.8	3.3	6.5
9	5.6	4.7	8.8	13.2	12.0	11.0	10.2	6.2	4.9	5.2	4.0	5.8
10	6.0	5.2	9.0	13.0	13.0	10.6	10.0	5.2	5.2	5.2	5.0	5.3
11	6.0	4.9	10.5	12.0	12.4	10.5	10.7	4.1	4.9	4.9	4.5	5.2
12	6.0	5.6	12.2	11.7	12.3	11.3	10.0	4.3	8.1	4.8	4.3	5.2
13	5.9	5.6	12.2	11.2	12.3	11.7	9.5	4.8	6.7	5.0	5.8	4.8
14	5.0	5.1	11.7	11.3	12.0	11.5	9.4	5.5	6.2	5.0	6.0	4.9
15	5.0	5.0	11.9	11.3	11.8	10.8	9.8	5.9	6.0	3.7	5.6	4.8
16	5.4	5.1	9.8	11.0	11.5	10.7	10.3	5.5	5.8	2.8	5.3	5.3
17	5.1	4.8	10.0	11.0	11.0	11.5	10.0	5.4	5.3	3.2	5.0	6.0
18	5.4	5.7	10.2	10.8	12.2	11.2	10.0	5.4	4.9	3.0	4.4	5.4
19	5.5	5.8	10.6	10.9	11.7	10.1	9.7	5.6	4.7	2.9	4.4	5.2
20	7.4	5.6	11.0	11.1	12.0	10.6	9.3	6.9	4.0	3.4	5.0	5.3
21	5.9	5.7	10.8	12.1	11.2	10.0	9.5	6.4	4.1	3.6	5.0	5.8
22	5.6	6.8	10.5	13.0	11.2	9.6	8.8	6.4	4.4	4.0	4.7	7.0
23	5.2	7.5	10.7	12.8	10.8	9.3	8.0	6.0	3.8	3.8	5.6	7.1
24	5.3	7.7	10.3	12.3	10.9	8.7	7.6	6.8	3.8	3.5	5.3	6.9
25	4.7	8.2	10.8	12.2	12.0	9.2	7.1	7.9	4.5	3.6	4.0	6.7
26	4.7	8.6	11.6	12.2	12.8	9.8	7.2	7.9	4.6	3.3	3.7	6.7
27	6.7	9.0	11.5	12.0	12.1	10.1	7.2	7.9	4.2	3.6	3.7	6.5
28	4.7	9.6	11.5	11.8	12.1	10.6	7.9	7.3	3.7	3.4	4.0	6.5
29	4.8	9.8	11.6	11.5	---	10.6	8.3	7.0	4.2	3.3	4.0	6.3
30	7.5	10.0	10.6	11.2	---	10.3	8.2	7.0	4.0	3.6	3.2	6.1
31	7.5	---	11.0	11.4	---	10.0	---	6.8	---	4.3	2.2	---
MEAN	5.6	6.3	10.4	11.7	11.8	10.6	9.2	6.5	5.2	4.0	4.3	5.6

WTR YR 1979 MEAN 7.6 MAX 13.2 MIN 2.2

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15.0	11.0	5.0	---	1.0	1.0	11.0	15.5	20.0	22.0	25.5	25.0
2	16.0	10.0	4.0	5.5	.0	1.5	11.5	15.5	20.0	22.0	25.5	25.0
3	15.5	10.0	---	3.5	.0	3.0	14.5	15.5	20.0	21.5	27.0	25.0
4	15.5	11.0	4.5	1.5	.0	3.0	11.0	16.0	20.5	21.5	27.0	24.0
5	15.0	11.0	5.5	.5	.5	4.5	9.5	15.5	18.5	20.0	27.0	24.0
6	16.0	11.0	6.5	.5	.0	5.0	9.5	15.0	19.5	19.0	27.0	24.5
7	15.5	11.0	7.0	1.0	.5	5.5	8.5	15.5	19.5	19.0	24.5	21.5
8	14.0	11.5	7.0	3.5	.0	5.5	9.0	17.0	20.5	20.5	24.0	22.0
9	13.0	10.5	9.0	1.5	.0	5.5	9.0	19.0	20.5	21.5	24.5	20.0
10	12.0	11.0	5.0	1.0	.5	6.5	7.0	21.0	21.0	22.0	25.5	19.0
11	13.0	11.0	3.5	.5	.0	5.5	7.0	22.0	20.5	22.0	25.5	19.5
12	14.0	11.0	2.0	.0	.0	4.5	10.5	20.0	17.0	22.0	21.5	19.5
13	15.0	10.5	3.5	.0	.0	3.5	11.0	19.0	17.0	24.0	18.5	20.0
14	16.5	10.5	2.0	2.0	.0	5.5	11.0	19.0	19.0	25.5	19.5	20.5
15	15.5	11.0	2.0	.5	.0	5.0	11.0	18.0	18.5	25.0	19.0	21.0
16	12.0	10.5	2.0	.5	.5	4.0	9.5	19.0	20.0	---	19.5	20.0
17	12.0	10.0	3.0	1.0	.5	5.0	9.0	18.5	21.0	25.0	19.0	---
18	11.5	10.0	2.0	1.0	.5	5.5	9.5	19.0	21.0	24.0	19.5	19.5
19	12.0	10.5	1.5	.0	.5	5.5	10.5	16.5	21.5	24.0	19.5	19.5
20	11.5	10.0	1.0	.5	.5	6.5	11.0	15.5	21.5	24.5	20.0	18.0
21	11.5	9.5	2.0	1.0	.5	5.5	11.0	18.0	22.0	24.0	21.0	18.0
22	12.0	6.0	2.0	1.0	1.0	8.5	12.0	18.0	18.5	25.0	21.5	18.0
23	13.0	7.0	2.0	.5	.5	9.5	12.0	18.5	20.5	25.5	22.0	17.0
24	11.5	8.0	3.0	1.0	1.0	10.5	15.5	17.0	21.0	25.5	23.5	16.5
25	11.0	7.0	2.0	2.0	1.0	10.0	15.5	18.0	19.0	26.5	23.0	16.0
26	12.0	5.5	2.0	1.5	1.0	9.0	15.5	18.0	19.0	26.5	24.0	16.0
27	11.5	---	1.5	1.0	1.5	9.5	15.5	16.5	20.0	25.5	24.5	16.0
28	11.5	4.5	1.5	1.0	1.0	6.5	14.0	20.0	21.0	25.5	25.5	16.5
29	12.0	4.5	.0	1.5	---	7.0	14.0	18.0	22.0	25.0	25.5	18.0
30	11.0	4.5	.0	2.0	---	8.5	15.5	17.0	22.0	25.5	25.5	19.0
31	10.5	---	1.0	1.5	---	9.0	---	18.0	---	25.5	25.0	---
MEAN	13.0	9.5	3.0	1.5	.5	6.0	11.5	17.5	20.0	23.5	23.0	20.0

WTR YR 1979 MEAN 12.5 MAX 27.0 MIN .0

01389880 PASSAIC RIVER AT ROUTE 46 AT ELMWOOD PARK, NJ

LOCATION.--Lat 40°53'37", long 74°07'46", Passaic County, Hydrologic Unit 02030103, at bridge on U.S. Route 46 at Elmwood Park, and 0.8 mi (1.3 km) upstream from Dundee Dam.

DRAINAGE AREA.--803 mi² (2,080 km²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1974 to current year.

REMARKS.--Operated as part of the USGS-EPA paired station network. Instantaneous water discharge estimated on the basis of water discharge for 01389500 Passaic River at Little Falls, drainage area relationships, and known diversions.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (JTU)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, CHEM-ICAL (LOW LEVEL) (MG/L)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)
OCT											
03...	1030	E200	461	7.4	16.0	4	--	6.0	--	15	200
24...	1100	E150	492	7.4	13.0	5	--	5.6	24	--	1300
NOV											
02...	1100	E190	513	7.4	11.5	4	--	5.8	28	--	2000
14...	1045	E160	535	7.7	10.0	4	--	6.6	23	--	900
DEC											
05...	1045	E720	405	7.7	6.0	6	--	11.2	--	21	380
13...	1130	E1400	265	7.3	2.5	6	--	14.2	--	31	500
28...	1015	E1100	292	7.5	.5	15	--	14.8	--	37	220
JAN											
10...	1100	E4100	220	7.2	.0	1	--	15.8	--	20	780
30...	0915	E6500	165	--	--	15	--	--	--	21	--
FEB											
12...	1200	E670	380	7.6	.0	3	--	10.0	--	73	1000
28...	1140	E5000	205	7.3	1.5	13	--	15.4	--	11	K2200
MAR											
14...	1130	E4100	195	7.4	5.5	6	--	13.7	--	16	--
26...	1040	E2400	275	7.6	10.0	--	8.0	11.4	--	23	1100
APR											
11...	1100	E2100	245	7.7	8.5	--	10	11.8	--	27	K670
24...	1045	E990	300	7.6	16.5	--	4.0	9.0	--	11	930
MAY											
09...	1100	E850	295	7.5	20.0	--	50	7.8	--	17	--
24...	0925	E2600	232	7.5	16.5	--	20	9.0	--	36	8200
JUN											
05...	0900	E2600	230	7.6	18.5	--	6.0	9.1	--	22	K3300
19...	1130	E810	310	7.6	22.5	--	5.0	7.0	--	24	2800
JUL											
05...	0945	E390	430	7.8	20.5	--	3.0	6.2	--	28	1600
16...	1210	E300	380	7.7	26.5	--	6.0	6.0	--	28	5800
AUG											
01...	1050	E200	480	7.9	26.5	--	4.0	7.4	--	46	6000
15...	1045	E890	268	7.6	18.5	--	15	7.7	--	20	--
27...	1015	E290	440	7.8	25.0	--	5.0	8.1	--	58	4600
SEP											
13...	1050	E1600	235	7.4	19.5	--	10	8.5	--	37	670
24...	1325	E1700	218	7.4	16.5	--	20	10.1	--	29	--

01389880 PASSAIC RIVER AT ROUTE 46 AT ELMWOOD PARK, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)	CALCIUM TOTAL RECOV-ERABLE (MG/L AS CA)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, TOTAL RECOV-ERABLE (MG/L AS MG)	MAGNE-SIUM, SUS-PENDED TOTAL (MG/L AS MG)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, TOTAL RECOV-ERABLE (MG/L AS NA)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, TOTAL RECOV-ERABLE (MG/L AS K)
OCT										
03...	110	130	--	34	--	--	10	--	36	--
24...	490	--	--	--	--	--	--	--	--	--
NOV										
02...	K270	--	--	--	--	--	--	--	--	--
14...	380	--	--	--	--	--	--	--	--	--
DEC										
06...	240	--	--	--	--	--	--	--	--	--
13...	440	67	17	17	6.0	--	6.0	19	19	2.5
28...	300	--	--	--	--	--	--	--	--	--
JAN										
10...	600	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--
FEB										
12...	--	--	--	--	--	--	--	--	--	--
28...	930	--	--	--	--	--	--	--	--	--
MAR										
14...	330	49	13	13	4.1	--	4.1	--	17	1.3
26...	380	--	--	--	--	--	--	--	--	--
APR										
11...	210	--	--	--	--	--	--	--	--	--
24...	300	--	--	--	--	--	--	--	--	--
MAY										
09...	--	--	--	--	--	--	--	--	--	--
24...	K6000	--	--	--	--	--	--	--	--	--
JUN										
05...	K3200	66	18	18	5.2	.0	5.2	16	15	1.8
19...	330	--	--	--	--	--	--	--	--	--
JUL										
05...	270	--	--	--	--	--	--	--	--	--
16...	230	--	--	--	--	--	--	--	--	--
AUG										
01...	220	--	--	--	--	--	--	--	--	--
15...	700	--	--	--	--	--	--	--	--	--
27...	260	--	--	--	--	--	--	--	--	--
SEP										
13...	310	66	18	18	5.5	.4	5.1	16	16	2.5
24...	--	--	--	--	--	--	--	--	--	--

DATE	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SEDI-MENT, SUS-PENDED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)
OCT										
03...	4.1	96	0	79	43	51	276	14	3.9	.72
24...	--	215	0	176	--	--	308	12	4.9	.94
NOV										
02...	--	222	0	182	--	--	310	11	2.7	1.7
14...	--	210	0	172	--	--	303	12	4.1	1.8
DEC										
06...	--	--	--	--	--	--	231	10	1.5	1.6
13...	2.5	--	--	--	29	29	151	16	1.3	.68
28...	--	56	0	46	--	--	153	--	1.2	1.0
JAN										
10...	--	29	0	24	--	--	125	29	.00	.34
30...	--	--	--	--	--	--	95	19	.54	.21
FEB										
12...	--	--	--	--	--	--	211	8	1.1	1.7
28...	--	--	--	--	--	--	118	20	.59	.31
MAR										
14...	1.2	37	0	30	19	26	116	8	.62	.27
26...	--	--	--	--	--	--	163	98	.81	.79
APR										
11...	--	--	--	--	--	--	130	100	--	--
24...	--	--	--	--	--	--	162	--	.99	.68
MAY										
09...	--	--	--	--	--	--	164	14	1.3	.63
24...	--	--	--	--	--	--	129	80	1.1	.44
JUN										
05...	1.7	59	0	48	20	25	137	18	.88	.27
19...	--	--	--	--	--	--	186	14	1.7	.35
JUL										
05...	--	--	--	--	--	--	271	18	2.3	.40
16...	--	--	--	--	--	--	242	13	1.9	.64
AUG										
01...	--	--	--	--	--	--	275	13	2.5	.44
15...	--	--	--	--	--	--	157	33	1.5	.37
27...	--	--	--	--	--	--	257	16	3.0	.42
SEP										
13...	2.5	61	0	50	21	24	140	38	.87	.22
24...	--	--	--	--	--	--	123	27	1.6	.31

01389880 PASSAIC RIVER AT ROUTE 46 AT ELMWOOD PARK, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHATE, TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)	ARSENIC TOTAL (UG/L AS AS)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
OCT										
03...	.98	1.7	5.6	.66	--	7.3	1	--	<10	8
24...	.96	1.9	6.8	.87	--	23	1	0	10	11
NOV										
02...	.90	2.6	5.3	.83	--	7.2	1	--	10	10
14...	.80	2.6	6.7	.92	--	11	1	--	10	10
DEC										
06...	.70	2.3	3.8	.60	--	7.8	1	--	10	9
13...	.82	1.5	2.8	.33	--	8.0	1	--	10	9
28...	.80	1.8	3.0	.30	--	8.3	2	0	30	11
JAN										
10...	.46	.80	.80	.22	--	4.9	1	--	10	9
30...	.35	.56	1.1	.14	--	4.8	1	--	<10	7
FEB										
12...	.60	2.3	3.4	.38	--	5.0	0	0	<10	7
28...	.53	.84	1.4	.11	--	4.9	1	0	10	7
MAR										
14...	.32	.59	1.2	.12	--	4.5	1	0	<10	23
26...	.41	1.2	2.0	.26	--	5.0	2	0	10	8
APR										
11...	--	--	--	--	--	--	3	1	10	9
24...	.82	1.5	2.5	.33	1.0	8.5	1	0	<10	8
MAY										
09...	.87	1.5	2.8	.32	.98	5.6	5	0	10	9
24...	1.2	1.6	2.7	.41	1.3	7.5	3	0	30	19
JUN										
05...	.59	.86	1.7	.27	.83	7.1	3	0	20	10
19...	.85	1.2	2.9	.32	.98	7.4	3	1	10	11
JUL										
05...	1.1	1.5	3.8	.43	1.3	7.2	2	0	40	12
16...	1.2	1.8	3.7	.50	--	5.5	1	0	40	12
AUG										
01...	1.3	1.7	4.2	.56	--	4.2	2	0	20	9
15...	.83	1.2	2.7	.40	--	7.7	2	0	20	12
27...	1.1	1.5	4.5	.53	--	12	2	2	20	9
SEP										
13...	.98	1.2	2.1	.35	--	11	2	0	10	13
24...	.46	.77	2.4	.36	--	6.9	--	0	10	15

DATE	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	OIL AND GREASE (MG/L)	OIL AND GREASE, TOTAL RECOV. GRAVIMETRIC (MG/L)	CHLOROPHYLL A PHYTOPLANKTON, UNCORR. (UG/L)	CHLOROPHYLL B PHYTOPLANKTON, UNCORR. (UG/L)	CHLOR-A PHYTOPLANKTON CHROMO FLUOROM (UG/L)	CHLOR-B PHYTOPLANKTON CHROMO FLUOROM (UG/L)
OCT										
03...	680	--	<.5	20	--	0	20.4	1.35	--	--
24...	650	--	<.5	40	0	--	5.52	.599	--	--
NOV										
02...	670	--	.8	130	0	--	--	--	4.44	.000
14...	570	--	<.5	60	0	--	--	--	7.40	.000
DEC										
06...	740	--	<.5	40	--	0	--	--	2.39	.000
13...	1300	--	<.5	50	--	0	--	--	1.80	.000
28...	1400	--	.1	80	--	0	--	--	.080	.000
JAN										
10...	1100	--	--	70	--	0	--	--	3.78	.000
30...	1200	--	--	50	--	1	--	--	.510	.000
FEB										
12...	500	6	--	60	--	0	--	--	.110	.000
28...	1000	9	--	40	--	0	--	--	.640	.000
MAR										
14...	530	12	--	50	--	1	--	--	1.77	.000
26...	830	15	<.5	30	--	1	--	--	6.45	.000
APR										
11...	910	15	.5	50	--	1	--	--	6.34	.000
24...	820	8	<.5	50	--	0	--	--	9.01	.000
MAY										
09...	920	7	.5	60	--	0	--	--	6.21	.000
24...	3000	43	<.5	40	--	5	--	--	8.79	.000
JUN										
05...	1000	10	<.5	60	--	2	--	--	4.69	.000
19...	800	18	<.5	60	--	0	--	--	7.87	.000
JUL										
05...	790	20	<.5	40	--	2	--	--	19.0	.190
16...	680	9	<.5	40	--	0	--	--	28.6	4.31
AUG										
01...	530	18	<.5	20	--	1	--	--	15.7	9.23
15...	1400	16	<.5	40	--	0	--	--	8.66	.000
27...	640	18	<.5	20	--	0	--	--	45.1	6.80
SEP										
13...	1100	15	<.5	50	--	0	--	--	7.55	.000
24...	1900	20	--	20	--	--	--	--	3.59	.000

01390500 SADDLE RIVER AT RIDGEWOOD, NJ

LOCATION.--Lat 40°59'05", long 74°05'30", Bergen County, Hydrologic Unit 02030103, on left bank 15 ft (4.6 m) upstream from bridge on State Highway 17 in Ridgewood and 2.8 mi (4.5 km) upstream from Hohokus Brook.

DRAINAGE AREA.--21.6 mi^2 (55.9 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1954 to September 1974, October 1977 to current year. Operated as a maximum-stage gage water years 1975-77.

REVISED RECORDS.--WRD-NJ 1974: 1971.

GAGE.--Water-stage recorder. Datum of gage is 71.74 ft (21.866 m) National Geodetic Vertical Datum of 1929 (levels from New Jersey Geological Survey bench mark).

REMARKS.--Water-discharge records poor. The flow past this station is affected by diversions by pumpage from wells by Hackensack Water Co. and others.

AVERAGE DISCHARGE.--22 years (1955-74, 1978-79), 36.4 ft^3/s (1.031 m^3/s), 22.88 in/yr (581 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,650 ft^3/s (132 m^3/s) Nov. 8, 1977, gage height, 12.25 ft (3.734 m); minimum daily, 0.2 ft^3/s (0.006 m^3/s) Sept. 17, 18, 1966.

EXTREMES OUTSIDE OF PERIOD OF RECORD.--Flood on July 23, 1945, reached a discharge of 6,400 ft^3/s (181 m^3/s), at site 1.6 mi (2.6 km) upstream, drainage area, 19.1 mi^2 (49.5 km^2), by slope-area measurement.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 380 ft^3/s (10.8 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage Height (ft)	Gage Height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage Height (ft)	Gage Height (m)
Jan. 8	0800	561	15.9	4.42	1.347	Mar. 6	1500	619	17.5	4.59	1.399
Jan. 21	1230	1250	35.4	6.12	1.865	May 27	unknown	800	22.7	unknown	
Jan. 25	0330	*1260	35.7	6.14	1.871	Sept. 6	1245	709	20.1	4.84	1.475
Feb. 21	0915	778	22.0	5.02	1.530	Sept. 22	0200	427	12.1	3.99	1.216

Minimum discharge, 8.1 ft^3/s (0.23 m^3/s) Sept. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	12	20	29	50	59	35	49	54	25	10	10
2	11	12	15	120	45	59	35	43	50	44	11	11
3	9.0	11	10	93	40	54	45	42	98	25	16	49
4	10	11	15	39	39	48	45	48	82	18	24	17
5	12	11	19	33	37	49	46	43	67	22	11	13
6	19	11	12	26	38	386	42	38	54	18	17	242
7	13	14	10	36	35	178	37	35	42	16	26	47
8	10	15	30	383	32	94	32	33	37	15	20	21
9	8.2	15	152	83	36	77	50	30	35	14	15	19
10	8.6	14	68	47	26	74	108	27	34	13	12	14
11	9.2	13	34	37	26	118	50	56	66	13	10	11
12	9.8	13	25	45	25	74	41	35	61	13	50	11
13	10	14	20	62	25	62	39	37	39	12	110	10
14	20	14	17	96	24	66	68	42	34	53	35	14
15	17	18	15	44	24	58	100	35	32	35	18	25
16	12	17	14	34	23	49	62	29	30	20	14	11
17	9.6	21	14	30	23	49	54	24	27	30	12	9.7
18	9.0	55	14	28	23	47	51	50	25	45	14	9.0
19	9.2	27	14	45	23	42	48	160	23	20	21	8.7
20	9.4	16	14	40	23	42	45	95	22	10	15	8.1
21	9.6	13	48	736	23	36	42	55	21	9.8	13	33
22	9.8	11	35	154	27	39	40	41	20	9.5	12	191
23	10	10	25	72	28	38	40	100	20	9.0	12	32
24	10	40	19	239	189	42	39	220	19	15	13	19
25	10	24	99	548	227	93	40	530	18	38	14	15
26	11	15	47	120	325	47	50	200	17	25	10	14
27	24	12	34	90	93	40	190	100	16	15	9.3	13
28	20	12	26	80	69	37	100	76	19	10	8.7	12
29	14	13	22	69	---	38	64	67	24	10	26	13
30	13	41	19	59	---	41	58	62	16	12	36	21
31	12	---	17	55	---	37	---	58	---	11	13	---
TOTAL	369.4	525	923	3572	1598	2173	1696	2460	1102	625.3	628.0	923.5
MEAN	11.9	17.5	29.8	115	57.1	70.1	56.5	79.4	36.7	20.2	20.3	30.8
MAX	24	55	152	736	325	386	190	530	98	53	110	242
MIN	8.2	10	10	26	23	36	32	24	16	9.0	8.7	8.1
CFSM	.55	.81	1.38	5.32	2.64	3.25	2.62	3.68	1.70	.94	.94	1.43
IN.	.64	.90	1.59	6.15	2.75	3.74	2.92	4.24	1.90	1.08	1.08	1.59

CAL YR 1978 TOTAL 14076.9 MEAN 38.6 MAX 551 MIN 6.1 CFSM 1.79 IN 24.24
WTR YR 1979 TOTAL 16595.2 MEAN 45.5 MAX 736 MIN 8.1 CFSM 2.11 IN 28.58

Note.--No gage-height record Apr. 18 to June 6.

01391000 HOHOKUS BROOK AT HOHOKUS, NJ

LOCATION.--Lat 40°59'52", long 74°06'48", Bergen County, Hydrologic Unit 02030103, on left bank 500 ft (150 m) upstream from bridge on Maple Avenue in Hohokus, and 3.5 mi (5.6 km) upstream from mouth.

DRAINAGE AREA.--16.4 mi^2 (42.5 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1954 to September 1973, October 1977 to current year. Operated as a crest-stage partial-record station, water years 1974-77.

REVISED RECORDS.--WDR NJ-77-1: 1955(M), 1968(M), 1976(M).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 120.09 ft (36.603 m) National Geodetic Vertical Datum of 1929 (levels from New Jersey Geological Survey bench mark).

REMARKS.--Water-discharge records good except those for periods of no gage-height record and those above 100 ft^3/s (2.8 m^3/s), which are poor. Some regulation at low and medium flows caused by unknown sources.

AVERAGE DISCHARGE.--21 years, (1955-73, 1978-79) 32.4 ft^3/s (0.918 m^3/s), 26.83 in/yr (681 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,700 ft^3/s (105 m^3/s) Nov. 8, 1977, (gage height, 7.06 ft or 2.152 m), from rating curve extended above 750 ft^3/s (212 m^3/s) by computation of peak flow over dam; minimum, 1.9 ft^3/s (0.054 m^3/s) Aug. 2, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 450 ft^3/s (12.7 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage Height (ft)	Gage Height (m)
Jan. 21	0700	588	16.7	3.04	0.927
Jan. 25	0015	*657	18.6	3.14	0.957
Feb. 26	Unknown	480	13.6	Unknown	
Mar. 6	Unknown	460	13.0	Unknown	
May 25	0500	453	12.8	2.82	0.860
Sept. 6	0830	701	19.9	3.20	0.975

Minimum daily discharge, 8.4 ft^3/s (0.24 m^3/s) Oct. 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	11	21	39	35	47	38	52	50	40	13	15
2	14	11	17	97	31	44	37	45	43	60	15	15
3	12	11	16	84	30	40	47	46	78	25	21	46
4	13	11	23	36	29	37	48	49	66	23	28	25
5	15	11	23	28	26	37	48	44	61	23	15	25
6	18	12	18	26	24	360	42	41	58	20	24	245
7	15	12	15	38	24	100	38	37	44	18	17	62
8	11	12	29	248	26	75	35	34	39	17	14	29
9	9.8	11	110	86	26	62	70	31	37	17	13	24
10	9.6	11	63	46	25	58	120	28	36	17	17	22
11	10	12	30	36	25	100	50	58	64	17	20	19
12	10	12	24	30	25	56	45	35	67	16	97	17
13	13	11	22	45	25	49	42	40	42	16	69	21
14	20	11	21	88	24	52	70	42	31	48	27	30
15	15	11	19	46	24	43	110	38	30	30	19	31
16	10	12	19	36	24	37	62	32	28	29	16	18
17	10	21	21	32	24	37	56	27	28	29	15	16
18	9.8	43	20	30	23	36	53	70	30	22	19	15
19	9.4	18	17	29	23	34	50	113	31	18	20	16
20	8.8	15	17	29	23	36	46	60	27	17	17	15
21	8.6	13	46	431	23	40	43	41	22	16	15	46
22	8.4	13	26	120	23	41	41	34	22	16	15	139
23	9.0	15	21	64	35	42	40	73	22	15	14	41
24	9.4	42	21	177	180	45	40	203	20	23	24	26
25	9.8	18	82	252	220	98	42	270	20	15	21	22
26	12	15	43	86	300	46	48	98	19	14	16	21
27	23	14	28	64	72	43	200	67	19	14	16	22
28	15	16	22	56	59	40	95	59	20	14	13	21
29	13	16	20	49	---	42	74	61	21	14	34	20
30	11	39	19	42	---	44	60	50	21	15	31	32
31	11	---	20	39	---	40	---	56	---	13	17	---
TOTAL	376.6	480	893	2509	1428	1861	1790	1934	1096	671	712	1096
MEAN	12.1	16.0	28.8	80.9	51.0	60.0	59.7	62.4	36.5	21.6	23.0	36.5
MAX	23	43	110	431	300	360	200	270	78	60	97	245
MIN	8.4	11	15	26	23	34	35	27	19	13	13	15
CFSM	.74	.98	1.76	4.93	3.11	3.66	3.64	3.81	2.23	1.32	1.40	2.23
IN.	.85	1.09	2.03	5.69	3.24	4.22	4.06	4.39	2.49	1.52	1.61	2.49

CAL YR 1978 TOTAL 13487.6 MEAN 37.0 MAX 338 MIN 8.4 CFSM 2.26 IN 30.59
WTR YR 1979 TOTAL 14846.6 MEAN 40.7 MAX 431 MIN 8.4 CFSM 2.48 IN 33.67

Note.--No gage-height record Feb. 8 to May 18.

01391110 SADDLE RIVER AT PARAMUS, NJ

LOCATION.--Lat 40°56'47", long 74°05'56", Bergen County, Hydrologic Unit 02030103, at former site of bridge on Dunkerhook Road in Paramus, and 0.7 mi (1.1 km) downstream from Hohokus Brook.

DRAINAGE AREA.--45.0 mi² (116.6 km²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water year 1967, 1978-79 (discontinued).

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, BC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)
OCT 05...	1100	550	7.4	17.0	6.6	1.0	20	13	190

DATE	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
OCT 05...	50	15	56	6.4	120	.0	55	70	.1

DATE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHATE, TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 05...	15	402	8.1	1.6	2.5	4.1	12	8.4	10

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)
OCT 05...	1100	30	1	0	<10	20	230

DATE	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	PHENOLS (UG/L)
OCT 05...	90	<.5	12	0	40	0

01391200 SADDLE RIVER AT FAIR LAWN, NJ

LOCATION.--Lat 40°56'30", long 74°05'36", Bergen County, Hydrologic Unit 02030103, at bridge on Century Road in Fair Lawn, and 0.8 mi (1.3 km) downstream from Hohokus Brook.

DRAINAGE AREA.--45.2 mi² (117.1 km²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--February to September 1979.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
FEB 22...	1415	720	7.5	7.0	11.8	2.4	<200	<200	150	41
APR 04...	1315	440	7.9	9.5	11.5	3.6	<20	20	140	38
JUN 12...	1055	345	7.6	16.5	8.8	6.2	1300	14	110	31
JUL 24...	1210	620	7.8	25.5	7.1	5.0	80	--	170	45
AUG 07...	1155	480	7.8	23.0	6.9	6.4	5400	490	150	40
SEP 26...	1325	600	7.6	18.5	7.3	3.6	200	700	170	45

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
FEB 22...	11	65	3.4	146	0	120	--	40	110	.1
APR 04...	10	29	2.3	122	0	100	--	33	47	.0
JUN 12...	7.7	21	2.2	102	0	84	--	25	33	.1
JUL 24...	13	42	5.3	154	0	126	--	41	62	.1
AUG 07...	11	34	3.9	137	0	112	--	36	48	.1
SEP 26...	13	42	5.1	154	0	126	.0	40	66	.1

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHATE, TOTAL (MG/L AS PO4)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
FEB 22...	15	385	2.8	3.9	.90	4.8	7.6	3.0	2.7	8.1
APR 04...	10	242	2.0	1.6	.50	2.1	4.1	1.4	1.3	5.3
JUN 12...	10	105	1.7	.82	1.5	2.3	4.0	1.3	1.0	7.2
JUL 24...	14	380	12	2.2	2.1	4.3	16	9.4	5.0	10
AUG 07...	11	282	6.0	1.6	1.1	2.7	8.7	4.0	3.9	7.3
SEP 26...	14	362	5.4	.08	4.8	4.9	10	4.8	4.5	6.0

01391200 SADDLE RIVER AT FAIR LAWN, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	NITROGEN,NH4 + ORG. TOT IN BOT MAT (MG/KG AS N)	CARBON, ORGANIC TOT. IN BOTTOM MAT. (G/KG AS C)	CARBON, INORGANIC, TOT IN BOT MAT (G/KG AS C)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (G/KG AS C)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)
SEP 26...	1325	700	2.2	.0	2.2	20	2	0	10	190	0

DATE	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)
SEP 26...	<10	10	<10	<10	16	<10	370	7900	3	30	120

DATE	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, TOTAL IN BOTTOM MATERIAL (UG/G)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	PHENOLS (UG/L)
SEP 26...	100	<.5	.00	3	<10	0	0	20	40	4

DATE	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIAZINON, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG)
SEP 26...	9	.0	8	.8	.5	1.9	.0	.4	.0	.0

DATE	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	MALATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	METHOXYCHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARATHION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRITHION, TOT. IN BOTTOM MATL. (UG/KG)	PARATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	TRITHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)
SEP 26...	.0	.0	.0	.0	.0	.0	.0	.0	.0	0

01391500 SADDLE RIVER AT LODI, NJ

LOCATION.--Lat 40°53'25", long 74°04'51", Bergen County, Hydrologic Unit 02030103, on left bank 560 ft (171 m) upstream from bridge on Outwater Lane in Lodi and 3.2 mi (5.1 km) upstream from mouth. Water-quality samples collected at bridge on Outwater Lane at high flows.

DRAINAGE AREA.--54.6 mi² (141.4 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1923 to current year.

REVISED RECORDS.--WSP 781: Drainage area. WSP 1031: 1940(M). WSP 1552: 1929(M), 1936(M), 1938. WRD-NJ 1969: 1967. WRD-NJ 1970: 1968, 1969.

GAGE.--Water-stage recorder. Concrete control since Nov. 2, 1938. Datum of gage is 25.00 ft (7.620 m) National Geodetic Vertical Datum of 1929. Prior to Nov. 2, 1938, at site 560 ft (171 m) downstream at datum 2.54 ft (0.774 m) lower.

REMARKS.--Water-discharge records good. Occasional regulation at low flow by mills above station. Diversion above station by Hackensack Water Co., for municipal supply (records given herein).

AVERAGE DISCHARGE.--56 years, 101 ft³/s (2.860 m³/s), 25.12 in/yr (638 mm/yr), adjusted for diversion since 1966.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,500 ft³/s (127 m³/s) Nov. 9, 1977, gage height, 12.36 ft (3.767 m), from high-water mark in gage house; minimum, 1.0 ft³/s (0.028 m³/s) May 25, 1938, gage height, 1.03 ft (0.314 m), site and datum then in use; minimum daily, 6.0 ft³/s (0.17 m³/s) Aug. 23, 1934.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,200 ft³/s (34.0 m³/s), and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage Height (ft)	Gage Height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage Height (ft)	Gage Height (m)
Jan. 8	1215	1360	38.5	4.91	1.497	Feb. 26	0900	1570	44.5	5.27	1.606
Jan. 21	1700	*2890	81.8	8.35	2.545	Mar. 6	2130	1550	43.9	5.24	1.597
Jan. 25	0700	2680	75.9	7.83	2.387	May 25	0715	1760	49.8	5.62	1.713

Minimum discharge, 14 ft³/s (0.40 m³/s) Nov. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	17	35	81	150	184	114	119	129	65	28	29
2	24	18	30	313	132	169	121	106	119	114	31	41
3	19	19	27	306	127	161	139	109	227	56	44	153
4	20	18	38	91	121	147	127	119	193	54	60	51
5	22	20	38	69	114	147	139	104	187	56	33	32
6	45	20	31	63	101	757	116	92	181	44	41	484
7	26	19	25	86	104	568	101	92	129	41	65	181
8	21	19	70	1040	104	277	101	82	116	37	42	76
9	18	20	508	289	95	217	214	71	99	39	39	46
10	17	19	224	128	86	202	243	67	90	36	40	45
11	19	20	70	90	88	347	142	132	124	36	65	39
12	20	18	51	81	82	217	121	84	78	34	181	33
13	22	18	46	176	72	181	111	88	60	34	243	32
14	41	18	44	326	63	190	267	104	59	127	65	62
15	43	20	36	149	71	172	217	92	57	69	42	80
16	30	20	35	105	63	150	155	69	58	53	36	33
17	20	101	47	80	72	147	142	59	58	84	34	32
18	19	121	49	73	67	145	129	80	62	111	36	31
19	20	39	31	68	57	134	119	326	64	54	53	30
20	20	29	32	84	80	127	111	172	56	36	36	27
21	22	22	131	2090	71	109	106	119	46	32	34	53
22	22	21	61	597	95	106	99	101	45	31	33	497
23	22	75	45	224	84	101	101	230	45	32	33	109
24	25	76	50	460	469	132	95	597	41	47	95	60
25	24	35	302	1840	609	237	95	1310	41	51	54	42
26	31	27	120	360	895	145	124	310	39	37	35	37
27	75	29	67	253	303	121	377	199	39	35	31	33
28	31	29	50	217	208	111	193	166	45	31	31	34
29	23	30	44	193	---	127	193	161	60	30	88	40
30	19	65	41	172	---	119	137	147	49	33	92	90
31	17	---	40	161	---	114	---	150	---	32	49	---
TOTAL	799	1002	2418	10265	4583	6061	4449	5657	2596	1571	1789	2532
MEAN	25.8	33.4	78.0	331	164	196	148	182	86.5	50.7	57.7	84.4
MAX	75	121	508	2090	895	757	377	1310	227	127	243	497
MIN	17	17	25	63	57	101	95	59	39	30	28	27
(†)	10.3	9.9	15.3	8.3	1.6	3.5	0	0.5	7.5	14.1	12.6	18.3
MEAN‡	36.1	43.3	93.3	339	166	200	148	182	94.0	64.8	70.3	103
CFSM‡	0.66	0.79	1.71	6.21	3.04	3.66	2.71	3.33	1.72	1.19	1.29	1.89
IN‡	0.76	0.89	1.97	7.16	3.17	4.22	3.03	3.84	1.92	1.37	1.48	2.10

CAL YR 1978 TOTAL 40910 MEAN 112 MAX 1450 MIN 17 MEAN‡ 119 CFSM‡ 2.18 IN‡ 29.60
WTR YR 1979 TOTAL 43722 MEAN 120 MAX 2090 MIN 17 MEAN‡ 129 CFSM‡ 2.36 IN‡ 32.08

† Diversion, equivalent in cubic feet per second, above station by Hackensack Water Co. Records of diversion furnished by Hackensack Water Co.

‡ Adjusted for diversion.

01391500 SADDLE RIVER AT LODI, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1962 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)
FEB 21...	1315	59	720	7.5	1.0	11.4	3.4	79	<2	170
MAR 22...	1400	109	490	7.8	14.0	10.0	--	240	23	150
JUN 12...	1320	69	345	7.6	18.5	8.0	4.6	3500	350	120
JUL 23...	1215	26	625	7.7	24.5	5.9	5.5	5400	2200	200
AUG 16...	1010	34	600	7.6	16.0	6.1	7.9	5400	>2400	170

DATE	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
FEB 21...	47	12	58	3.3	159	0	130	43	99	.1
MAR 22...	43	11	31	2.7	132	0	108	39	52	.1
JUN 12...	33	8.0	21	2.2	102	0	84	25	33	.1
JUL 23...	54	15	42	4.4	171	0	140	43	66	.1
AUG 16...	51	11	32	4.4	159	0	130	40	64	.1

DATE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN,AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHATE, TOTAL (MG/L AS PO4)	PHOSPHATE, ORTHO, DISSOLVED (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
FEB 21...	13	374	2.3	3.7	.10	3.8	6.1	2.5	2.0	1.6
MAR 22...	10	278	2.0	1.4	.80	2.2	4.2	1.5	1.3	6.6
JUN 12...	9.9	213	1.7	.38	1.2	1.6	3.3	1.2	.80	6.3
JUL 23...	14	393	3.6	1.8	.80	2.6	6.2	3.5	3.2	7.1
AUG 16...	13	350	5.2	<.10	--	3.1	8.3	3.2	3.2	5.2

01392210 THIRD RIVER AT PASSAIC, NJ

LOCATION.--Lat 40°49'47", long 74°09'46", Passaic County, Hydrologic Unit 02030103, on right bank 400 ft (122 m) upstream from bridge on State Highway 3, 0.8 mi (1.3 km) south of Passaic, 1.2 mi (1.9 km) upstream from Passaic River.

DRAINAGE AREA.--11.8 mi² (30.6 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1977 to current year.

GAGE.--Water-stage recorder. Datum of gage is 22.15 ft (6.75 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records poor. Some regulation from ponds upstream.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,300 ft³/s (65.1 m³/s) Nov. 8, 1977, (gage height, 8.25 ft or 2.515 m) from rating curve extended above 300 ft³/s) (8.50 m³/s) on basis of contracted-opening measurement of peak flow; minimum, 3.4 ft³/s (0.10 m³/s) Sept. 23, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 550 ft³/s (15.6 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage Height (ft)	Gage Height (m)
Jan. 21	0600	*875	24.8	5.32	1.622
Jan. 24	2100	800	22.7	5.13	1.564
Feb. 24	Unknown	580	16.4	Unknown	
Mar. 6	Unknown	650	18.4	Unknown	
May 23	2235	646	18.3	4.75	1.448
May 25	0435	557	15.8	4.52	1.378
Aug. 24	1510	572	16.2	4.56	1.390
Sept. 6	0540	765	21.7	5.04	1.536
Sept.21	2225	606	17.2	4.65	1.417

Minimum discharge, 4.0 ft³/s (0.113 m³/s) Feb. 6, Aug. 5, gage height, 1.81 ft (0.552 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	6.4	12	29	21	22	11	17	17	28	7.1	6.2
2	8.6	8.6	9.0	95	17	19	30	19	15	22	6.6	21
3	7.5	8.6	8.0	33	20	16	21	14	31	11	13	31
4	12	7.0	50	18	22	13	18	11	22	15	11	8.3
5	10	6.0	45	15	16	20	27	11	22	12	6.6	7.3
6	30	7.0	20	16	18	200	12	12	17	9.5	33	293
7	12	9.0	6.6	34	16	100	10	10	14	9.5	13	23
8	8.5	7.0	6.4	225	15	35	14	13	13	8.9	7.1	13
9	9.0	10	130	31	15	25	88	10	13	8.3	6.6	10
10	10	9.0	30	25	14	18	30	16	12	8.0	16	9.5
11	9.0	7.0	25	19	14	85	14	10	48	8.0	25	8.6
12	12	5.0	23	16	14	25	12	12	18	10	147	7.8
13	9.0	6.0	17	47	14	20	11	15	13	7.5	33	7.8
14	23	8.0	27	43	13	26	110	21	12	6.8	11	24
15	8.0	7.0	17	18	13	16	20	13	11	7.1	9.8	18
16	17	10	11	15	13	14	17	10	11	7.8	8.6	8.6
17	12	75	17	16	13	13	15	8.6	20	43	8.0	8.0
18	10	60	12	20	13	12	15	22	13	38	12	8.0
19	9.0	11	9.2	14	14	12	15	93	10	13	15	7.3
20	14	9.0	11	15	15	12	15	18	9.2	7.8	8.3	7.3
21	17	8.0	54	495	25	12	15	12	8.9	7.1	8.3	69
22	7.0	7.0	15	57	62	12	16	11	9.2	7.1	7.5	107
23	6.0	66	12	31	27	11	13	141	11	6.8	8.0	17
24	7.0	30	15	320	160	30	13	154	9.2	13	83	13
25	8.0	15	85	154	65	28	13	160	8.6	11	13	12
26	12	7.0	16	48	120	12	45	41	8.0	17	12	11
27	27	8.0	17	35	45	11	63	28	7.5	10	8.3	10
28	7.1	30	12	33	30	11	24	25	7.8	7.1	7.3	9.8
29	6.4	35	11	29	---	27	22	23	8.0	15	23	14
30	6.2	60	14	25	---	12	19	24	9.2	10	11	32
31	8.0	---	13	22	---	13	---	25	---	7.3	7.3	---
TOTAL	354.3	542.6	750.2	1993	844	882	748	999.6	428.6	392.6	586.4	822.5
MEAN	11.4	18.1	24.2	64.3	30.1	28.5	24.9	32.2	14.3	12.7	18.9	27.4
MAX	30	75	130	495	160	200	110	160	48	43	147	293
MIN	6.0	5.0	6.4	14	13	11	10	8.6	7.5	6.8	6.6	6.2

CAL YR 1978 TOTAL 9839.6 MEAN 27.0 MAX 344 MIN 5.0
WTR YR 1979 TOTAL 9343.8 MEAN 25.6 MAX 495 MIN 5.0

Note.--No gage-height record Nov. 4 to Dec. 12 and Feb. 10 to Apr. 17.

RESERVOIRS IN PASSAIC RIVER BASIN

01379990 SPLITROCK RESERVOIR.--Lat 40°57'40", long 74°27'45", Morris County, Hydrologic Unit 02030103, at dam on Beaver Brook, 2 mi (3 km) northeast of Hibernia, NJ. DRAINAGE AREA, 5.50 mi^2 (14.2 km^2). PERIOD OF RECORD, September 1925 to September 1931, December 1948 to September 1950, October 1953 to current year. Monthend contents only 1925-31, 1948-50, published in WSP 1302. October 1950 to September 1953 in Special Report 16, New Jersey Department of Environmental Protection. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

Reservoir is formed by a concrete gravity dam with earth embankment; present dam constructed 1946-48 and sluice gate first closed Dec. 22, 1948. Prior to 1946, reservoir was formed by earthfill dam with crest about 20 ft (6 m) lower. Capacity of spillway level, 3,310,000,000 gal (12.53 hm^3), elevation, 835 ft (254 m). Flow is regulated by two 30-inch (0.8 m) sluice gates. Flow is released for diversion for municipal supply of Jersey City. Records furnished by Jersey City, Bureau of Water.

01380900 BOONTON RESERVOIR.--Lat 40°53'. long 74°24', Morris County, Hydrologic Unit 02030103, at dam on Rockaway River at Boonton, NJ. DRAINAGE AREA, 119 mi^2 (308 km^2). PERIOD OF RECORD, April 1904 to September 1950, October 1953 to current year. Monthend contents only 1904-50, published in WSP 1302. October 1950 to September 1953 in Special Report 16, New Jersey Department of Environmental Protection. GAGE, hook gage. Datum of gage is National Geodetic Vertical Datum of 1929.

Reservoir is formed by a cyclopean masonry dam with earth wings; dam completed and storage began in 1904. Total capacity at spillway level, 7,620,000,000 gal (28.84 hm^3) elevation, 305.25 ft (93.04 m) of which 7,366,000,000 gal (27.88 hm^3) is usable contents above elevation 259.75 ft (79.17 m), sill of lowest outlet gate. Flow regulated by flashboards, 3 outlets in gatehouse at head of conduit and by two 48-inch (1.22 m) pipes bottom of sluice pipes at elevation 205 ft (62 m). Water is diverted from reservoir for municipal supply of Jersey City. Records furnished by Jersey City, Bureau of Water.

01382100 CANISTEAR RESERVOIR.--Lat 41°06'30", long 74°29'30", Sussex County, Hydrologic Unit 02030103, at dam on Pacock Brook, 1.8 mi (2.9 km) northeast of Stockholm, NJ. DRAINAGE AREA, 5.6 mi^2 (14.5 km^2). PERIOD OF RECORD, October 1923 to September 1950, October 1953 to current year. Monthend contents 1923-50, published in WSP 1302. October 1950 to September 1953 in Special Report 16, New Jersey Department of Environmental Protection. GAGE, stage gage. Datum of gage is National Geodetic Vertical Datum of 1929.

Reservoir is formed by earth-embankment type dam, completed about 1896. Capacity at spillway level, 2,407,000,000 gal (9.110 hm^3), elevation, 1,086.0 ft (331 m). Reservoir used for storage and water released for diversion at Macopin intake dam on Pequannock River prior to May 21, 1961, and for diversion at Charlotteburg Reservoir on Pequannock River since May 21, 1961, for municipal supply for city of Newark. Outflow is controlled mostly by operation of gates in pipes through dam. Records furnished by city of Newark, Division of Water Supply.

01382200 OAK RIDGE RESERVOIR.--Lat 41°02'30", long 74°30'10", Passaic County, Hydrologic Unit 02030103, at dam on Pequannock River, 0.9 mi (1.4 km) southwest of Oak Ridge, NJ. DRAINAGE AREA, 27.3 mi^2 (70.7 km^2). PERIOD OF RECORD, October 1923 to September 1950, October 1953 to current year. Monthend contents only 1924-50, published in WSP 1302. October 1950 to September 1953 in Special Report 16, New Jersey Department of Environmental Protection. GAGE, staff gage. Datum of gage is National Geodetic Vertical Datum of 1929.

Reservoir is formed by earthfill dam with concrete-core wall and ogee overflow section; dam constructed between 1880-92; dam raised 10 ft (3 m) during 1917-19. Capacity at spillway level, 3,895,000,000 gal (14.74 hm^3), elevation, 846.0 ft (257.86 m). Reservoir used for storage and water released for diversion at Macopin intake dam on Pequannock River prior to May 21, 1961, and diversion at Charlotteburg Reservoir on Pequannock River since May 21, 1961, for municipal supply of city of Newark. Outflow is controlled mostly by operation of gates in pipes through dam. Records furnished by city of Newark, Division of Water Supply.

01382300 CLINTON RESERVOIR.--Lat 41°04'30", long 74°27'00", Passaic County, Hydrologic Unit 02030103, at dam on Clinton Brook, 2.0 mi (3 km) north of Newfoundland, NJ. DRAINAGE AREA, 10.5 mi^2 (27.2 km^2). PERIOD OF RECORD, October 1923 to September 1950, October 1953 to current year. Monthend contents only 1923-50, published in WSP 1302. October 1950 to September 1953 in Special Report 16, New Jersey Department of Environment Protection. GAGE, staff gage. Datum of gage is National Geodetic Vertical Datum of 1929.

Reservoir is formed by earthfill dam constructed between 1889-92. Capacity at spillway level, 3,518,000,000 gal (13.32 hm^3), elevation, 992.0 ft (302.36 m). Reservoir used for storage and water released for diversion at Macopin intake dam on Pequannock River prior to May 21, 1961, and for diversion at Charlotteburg Reservoir since May 21, 1961, for municipal supply of city of Newark. Outflow is controlled mostly by operation of gates in pipes through dam. Records furnished by city of newark, Division of Water Supply.

01382380 CHARLOTTEBURG RESERVOIR.--Lat 41°01'34", long 74°25'30", Passaic County, Hydrologic Unit 02030103, at dam on Pequannock River, 1.1 mi (1.8 km) upstream from Macopin River, and 1.5 mi (2.4 km) southeast of Newfoundland, NJ. DRAINAGE AREA, 56.2 mi^2 (145.6 km^2). PERIOD OF RECORD, May 1961 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

Reservoir is formed by concrete-masonry dam and earth embankment, with concrete spillway at elevation 738.00 ft (224.942 m); storage began May 19, 1961. Spillway equipped with Bascule gate 5 ft (1.5 m) high. Capacity, 2,964,000,000 gal (11.22 hm^3), elevation, 743.00 ft (226.46 m), top to Bascule gate. No dead storage. Outflow is controlled by sluice and automatic Bascule gates. Water diverted from reservoir since May 21, 1961, for municipal supply of city of Newark. Records furnished by city of Newark, Division of Water Supply.

REVISION.--WRD-NJ 1974: Station number.

01382400 ECHO LAKE.--Lat 41°03'00", long 74°24'30", Passaic County, Hydrologic Unit 02030103, at Echo Lake Dam on Macopin River, 1.6 mi (2.6 km) north of Charlotteburg, NJ, and 1.9 mi (3.1 km) upstream from mouth. DRAINAGE AREA, 4.35 mi^2 (11.27 km^2). PERIOD OF RECORD, October 1927 to September 1950, October 1953 to current year. Monthend contents only 1928-50, published in WSP 1302. October 1950 to September 1953 in Special Report 16, New Jersey Department of Environmental Protection. GAGE, staff gage. Datum of gage is National Geodetic Vertical Datum of 1929.

Lake is formed by earth-embankment type dam completed about 1925. Capacity at spillway level, 1,583,000,000 gal (5.992 hm^3), elevation, 893.0 ft (272.19 m), with provision for additional storage of 180,000,000 gal (681,300 m^3) at elevation 894.9 ft (272.77 m) with flashboards. Usable contents, 1,045,000,000 gal (3.955 hm^3) above elevation 880.0 ft (268.22 m). Lake used for storage and water released for diversion at Macopin intake dam on Pequannock River prior to May 21, 1961, and water diverted to Charlotteburg Reservoir on Pequannock River since May 21, 1961, for municipal supply of city of Newark. Outflow to Macopin River controlled by operation of gates in gatehouse at dam and water released through pipe and canal to Charlotteburg Reservoir. Records furnished by City of Newark, Division of Water Supply.

RESERVOIRS IN PASSAIC RIVER BASIN--Continued

01383000 GREENWOOD LAKE.--Lat 41°09'36", long 74°20'03", Passaic County, Hydrologic Unit 02030103, in gatehouse near right end of Greenwood Lake Dam on Wanaque River at Awosting. DRAINAGE AREA, 27.1 mi^2 (7.02 mi^2). PERIOD OF RECORD, June 1898 to November 1903, June 1907 to current year (gage heights only prior to October 1953). GAGE, water-stage recorder. Datum of gage is 608.86 ft (185.58 m) National Geodetic Vertical Datum of 1929 (levels from New Jersey Geological Survey bench mark). Prior to Oct. 1, 1931, staff gage on former railroad bridge at site 100 ft (30 m) upstream at datum 89.75 ft (27.36 m) lower.

Reservoir is formed by earthfill dam with concrete spillway; dam completed about 1837 and reconstruction completed in 1928 with crest of spillway 0.25 ft (0.08 m) lower. Usable capacity, 6,860,000,000 gal (25.96 hm^3) between gage heights -4.00 ft (-1.22 m), sill of gate, and 10.00 ft (3.0 m), crest of spillway. Dead storage, 7,140,000,000 gal (27.02 hm^3). Outflow mostly regulated by two gates, 3.5 by 5.0 ft (1.1 m by 1.5 m). Records given herein represent usable capacity. Lake used for recreation.

EXTREMES FOR CURRENT YEAR: Maximum contents, 7,864,000,000 gal (29.765 hm^3) Sept. 6, gage height, 11.61 ft (3.539 m); minimum, 6,634,000,000 gal (25.110 hm^3) Nov. 17, gage height, 9.63 ft (2.935 m).

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 9,528,000,000 gal (36.068 hm^3) Oct. 9-14, 1903, gage height, 14.25 ft (4.343 m), present datum; minimum, 3,160,000,000 gal (11.96 hm^3) several days in November 1900, gage height, 3.50 ft (1.067 m), present datum.

01386990 WANAQUE RESERVOIR.--Lat 41°02'33", long 74°17'36", Passaic County, Hydrologic Unit 02030103, at Raymond Dam on Wanaque River at Wanaque. DRAINAGE AREA, 90.4 mi^2 (234.1 km^2). PERIOD OF RECORD, February 1928 to September 1950, October 1953 to current year. Monthend contents only 1928-50, published in WSP 1302. October 1950 to September 1953 in Special Report 16, New Jersey Department of Environmental Protection. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by North Jersey District Water Supply Commission).

Reservoir is formed by earthfill with concrete-core wall main dam and seven secondary dams; dams completed in 1927 and storage began in March 1928. Total capacity of spillway level, 28,010,000,000 gal (106.0 hm^3) elevation, 300.3 ft (91.5 m). Capacity available by gravity at spillway level, 26,230,000,000 gal (99.28 hm^3). Outflow mostly controlled by sluice gates in intake conduits in gage house. Water is diverted from reservoir for municipal supply. Diversion to reservoir from Post Brook and Ramapo River (see Passaic Rive Basin, diversions). Records furnished by North Jersey District Water Supply Commission.

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

Date	Elevation (feet)	Contents (million gallons)	Change in contents (equivalent in ft^3/s)	Elevation (feet)	Contents (million gallons)	Change in contents (equivalent in ft^3/s)	Elevation (feet)	Contents (million gallons)	Change in contents (equivalent in ft^3/s)
	01379990	SPLITROCK RESERVOIR *		01380900	BOONTON RESERVOIR *		01382100	CANISTEAR RESERVOIR †	
Sept. 30	834.90	3,282	-	297.42	5,661	-	1,081.90	1,991	-
Oct. 31	834.90	3,282	0	291.87	4,401	-62.9	1,071.20	1,037	-47.6
Nov. 30	832.30	2,784	-25.7	289.55	3,914	-25.1	1,058.00	200	-43.2
Dec. 31	829.20	2,243	-27.0	300.12	6,318	+120.0	1,061.00	336	+6.8
CAL YR 1978	-	-	-4.7	-	-	-6.3	-	-	-7.2
Jan. 31	834.00	3,108	+43.2	306.02	7,820	+75.0	1,077.50	1,580	+62.0
Feb. 28	835.60	3,454	+17.4	306.37	7,886	-3.6	1,086.20	1,869	+15.9
Mar. 31	835.40	3,385	-1.9	305.62	7,716	-8.4	1,086.20	2,427	+27.9
Apr. 30	835.40	3,385	0	305.77	7,755	+2.0	1,086.20	2,427	0
May 31	835.50	3,405	+1.0	306.12	7,846	+4.5	1,086.20	2,427	0
June 30	835.00	3,306	-5.1	305.27	7,625	-11.4	1,086.00	2,407	-1.0
July 31	834.90	3,282	-1.2	304.92	7,534	-4.5	1,086.00	2,407	0
Aug. 31	835.05	3,315	+1.7	304.42	7,404	-6.5	1,086.00	2,407	0
Sept. 30	835.20	3,346	-1.6	306.52	7,950	+28.2	1,081.10	2,417.0	0.5
WTR YR 1979	-	-	+0.3	-	-	+9.7	-	-	+1.8

Date	Elevation (feet)	Contents (million gallons)	Change in contents (equivalent in ft^3/s)	Elevation (feet)	Contents (million gallons)	Change in contents (equivalent in ft^3/s)	Elevation (feet)	Contents (million gallons)	Change in contents (equivalent in ft^3/s)
	01382200	OAK RIDGE RESERVOIR †		01382300	CLINTON RESERVOIR †		01382380	CHARLOTTEBURG RESERVOIR †	
Sept. 30	821.70	1,059	-	976.00	1,644	-	731.25	1,772	-
Oct. 31	821.50	1,043	-0.8	974.80	1,528	-5.8	731.75	1,815	+2.2
Nov. 30	822.10	1,093	+2.6	970.40	1,141	-19.9	732.15	1,850	+1.8
Dec. 31	823.10	1,179	+4.3	972.10	1,283	+7.1	731.60	1,802	-2.4
CAL YR 1978	-	-	-10.7	-	-	-9.6	-	-	-0.8
Jan. 31	845.80	3,867	+134.1	987.70	2,963	+83.8	740.05	2,627	+41.2
Feb. 28	846.20	3,924	+3.2	990.70	3,352	+21.5	736.30	2,234	-21.7
Mar. 31	846.20	3,924	0	992.20	3,544	+9.6	743.10	2,977	+37.0
Apr. 30	846.20	3,924	0	992.30	3,556	+0.6	743.15	2,983	+0.3
May 31	846.30	3,938	+0.7	992.20	3,544	-0.6	743.20	2,989	+0.3
June 30	846.10	3,909	-1.5	992.00	3,518	-1.3	735.30	2,138	-43.9
July 31	836.50	2,618	-64.4	988.60	3,083	-21.7	733.50	1,970	-8.4
Aug. 31	828.50	1,686	-46.6	982.10	2,281	-40.0	733.20	1,943	-1.4
Sept. 30	831.10	1,969	+14.6	985.70	2,692	+21.2	733.30	1,952	+0.5
WTR YR 1979	-	-	+3.8	-	-	+4.4	-	-	+0.8

RESERVOIRS IN PASSAIC RIVER BASIN--Continued

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

Date	Elevation (feet)	Contents (million gallons)	Change in contents (equivalent in ft³/s)	Gage height	Contents (million gallons)	Change in contents (equivalent in ft³/s)	Elevation (feet)	Contents (million gallons)	Change in contents (equivalent in ft³/s)
	01382400	ECHO LAKE †		01383000	GREENWOOD LAKE **		01386990	WANAQUE RESERVOIR †	
Sept. 30	889.9	1,312	-	9.80	6,738	-	287.53	19,258	-
Oct. 31	886.4	1,023	-14.4	9.82	6,750	+.6	281.29	15,665	-179.3
Nov. 30	884.2	849	-9.0	9.84	6,762	+.6	275.61	12,765	-149.6
Dec. 31	883.5	796	-2.6	10.15	6,953	+9.5	276.82	13,370	+30.2
CAL YR 1978	-	-	-2.5	-	-	-.5	-	-	-59.2
Jan. 31	888.3	1,176	+18.9	a10.51	7,176	+11.1	299.51	27,408	+700.5
Feb. 28	889.6	1,283	+5.9	a10.55	7,201	+1.1	300.74	28,352	+52.1
Mar. 31	892.6	1,546	+13.1	10.37	7,089	-5.6	302.56	29,752	+69.9
Apr. 30	893.3	1,611	+3.4	10.51	7,176	4.5	302.61	29,788	+1.8
May 31	893.1	1,592	-0.9	10.51	7,176	0	302.61	29,788	0
June 30	892.8	1,564	-1.4	10.01	6,866	-16.0	299.86	27,672	-109.1
July 31	892.7	1,555	-0.4	9.91	6,805	-3.0	295.66	24,632	-151.8
Aug. 31	893.0	1,583	+1.4	10.17	6,965	+8.0	292.72	22,614	-100.7
Sept. 30	891.2	1,423	-8.2	10.25	7,015	+2.6	297.65	26,045	+177.0
WTR YR 1979	-	-	+0.5	-	-	+1.2	-	-	+28.8

* Elevation at 0900.
** Gage height at 2400.
† Elevation at 0800 on first day of following month.
a Gage height estimated.

DIVERSIONS IN PASSAIC RIVER BASIN

01379510 Commonwealth Water Company diverts water from Passaic River, 1.2 mi (1.9 km) upstream from Canoe Brook for municipal supply. Records furnished by Commonwealth Water Company.

01379530 Commonwealth Water Company diverts water from Canoe Brook near Summit, 0.5 mi (0.8 km) from mouth, for municipal supply. Records furnished by Commonwealth Water Company.

01380800 Jersey City diverts water from Boonton Reservoir on Rockaway River at Boonton for municipal supply. Records furnished by Jersey City, Bureau of Water.

01382490 City of Newark diverts water from reservoir formed by Macopin intake dam on Pequannock River and, since May 21, 1961, also from Charlotteburg Reservoir on Pequannock River (diversion No. 01382370) for municipal supply. Records furnished by city of Newark, Division of Water Supply.

North Jersey District Water Supply Commission diverts water for municipal supply from Wanaque Reservoir on Wanaque River (01386980). In addition to water from Wanaque Reservoir, the Commission stores water diverted into Wanaque Reservoir from Post Brook near Wanaque (01387020) and Ramapo River by pumping from Pompton Lakes (0138790). Figures of diversion from Wanaque Reservoir given herein show total diversion from Passaic River basin by North Jersey District Water Supply Commission. Records furnished by North Jersey District Water Supply Commission.

01388500 Passaic Valley Water Commission supplements the dependable yield of its supply at Little Falls by diverting water at high flows at the Jackson Avenue Pumping Station into Point View Reservoir on Haycock Brook for release as required to sustain minimum flow requirements. Also water may be released into Haycock Brook for maintenance of flow in that stream. These diversions and releases occur upstream of Pompton Plains gaging station. Records furnished by Passaic Valley Water Commission. No diversion or release during the year.

01389490 The Passaic Valley Water Commission diverts water from Passaic River above Beattie's Dam at Little Falls for municipal supply. Records furnished by Passaic Valley Water Commission.

DIVERSIONS, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

					NORTH JERSEY DISTRICT WATER SUPPLY COMMISSION		
MONTH	COMMONWEALTH WATER COMPANY FROM PASSAIC RIVER	COMMONWEALTH WATER COMPANY FROM CANOE BROOK	JERSEY CITY	NEWARK	FROM WANAQUE RESERVOIR	FROM RAMAPO RIVER TO WANAQUE RESERVOIR	PASSAIC VALLEY WATER COMMISSION
October......	1.89	0	99.7	84.6	180	0	81.1
November.....	6.80	4.29	95.8	89.4	168	0	79.7
December.....	68.5	12.3	94.8	86.0	178	78.2	73.3
CAL YR 1978..	13.3	2.90	102	118	157	6.64	81.7
January......	38.6	19.6	93.6	104	168	137	79.9
February.....	7.79	1.39	95.0	129	151	0	79.8
March........	24.8	5.27	90.7	114	148	0	78.0
April........	30.0	1.41	93.7	138	154	0	63.1
May..........	25.8	6.99	97.6	133	152	0	77.5
June.........	3.16	0.37	99.4	128	168	0	79.7
July.........	3.13	0.54	98.2	133	157	0	95.2
August.......	2.85	4.02	97.5	126	157	0	96.3
September....	2.58	5.53	98.3	123	146	0	96.7
WTR YR 1979..	19.8	5.23	96.2	116	161	18.2	81.7

NOTE.--Records of diversion from Post Brook to Wanaque Reservoir not available for this water year. Estimated diversion usually made on the basis of records for West Brook near Wanaque will no longer be made because this gaging station was discontinued.

01393450 ELIZABETH RIVER AT URSINO LAKE, AT ELIZABETH, NJ

LOCATION.--Lat 40°40'30", long 74°13'20", Union County, Hydrologic Unit 02030104, on left bank at Ursino Lake Dam in Elizabeth 75 ft (23 m) upstream of bridge on Trotters Lane and 3.8 mi (6.1 km) upstream from mouth.

DRAINAGE AREA.--16.9 mi^2 (43.8 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1921 to current year.

REVISED RECORDS.--WSP 1552: Drainage area, 1922-23, 1927-29(M), 1932, 1933-34(M), 1938(P), 1942(M) 1944(P), 1945(M), 1948(P), 1952-53(M).

GAGE.--Water-stage recorder and concrete control. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to Oct. 1, 1922, nonrecording gage at site 2,800 ft (850 m) downstream at datum 4.14 ft (1.262 m) higher and Oct. 1, 1922 to May 18, 1923, at same site at datum 5.23 ft (1.594 m) higher. May 19, 1923 to Dec. 27, 1972, at site 2,800 ft (850 m) downstream at datum 5.23 ft (1.594 m) higher and published as "Elizabeth River at Elizabeth" (station 01393500).

REMARKS.--Water-discharge records good. Diversion by pumpage from Hammock Well Field in Union, for municipal supply by Elizabethtown Water Co., probably reduces the flow past the station.

AVERAGE DISCHARGE.--58 years, 25.7 ft^3/s (0.728 m^3/s), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,110 ft^3/s (116 m^3/s) Aug. 28, 1971, (gage height, 18.7 ft or 5.70 m, from floodmark, site and datum then in use) from rating curve extended above 1,100 ft^3/s (31.2 m^3/s) on basis of contracted-opening measurement of peak flow; no flow many times.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,500 ft^3/s (42.5 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage Height (ft)	Gage Height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage Height (ft)	Gage Height (m)
Jan. 21	0645	*2200	62.3	22.85	6.965	Sept. 6	0945	2160	61.2	22.76	6.937
Jan. 24	1945	1830	51.8	21.95	6.690	Sept. 22	0045	2050	58.0	22.49	6.855

Minimum discharge, 2.8 ft^3/s (0.08 m^3/s) Feb. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.6	6.9	11	38	14	23	12	11	15	120	9.7	7.9
2	8.6	6.6	8.3	185	13	22	32	11	12	41	15	25
3	8.6	6.6	6.6	42	12	17	24	11	41	17	24	10
4	30	5.5	51	17	11	15	20	12	43	19	11	8.6
5	10	4.6	46	12	11	20	29	9.7	31	12	8.1	9.4
6	61	5.5	11	13	12	420	13	8.4	19	11	113	752
7	9.5	6.0	8.9	115	12	84	11	9.9	15	10	14	49
8	6.6	5.7	87	336	14	35	15	10	16	9.5	10	18
9	6.9	6.0	291	44	11	24	89	11	15	11	9.1	10
10	7.5	6.0	43	22	10	20	33	11	12	11	19	10
11	7.5	4.9	17	17	8.9	88	16	11	120	11	64	11
12	7.8	3.7	12	15	10	24	13	22	27	11	226	9.9
13	7.2	4.9	11	62	11	21	12	16	17	11	40	9.5
14	15	5.5	11	38	12	28	109	38	15	13	14	51
15	5.2	5.2	9.5	16	11	18	24	13	14	8.6	11	16
16	13	6.0	9.2	13	11	16	19	11	13	8.8	9.3	7.7
17	9.8	88	26	13	12	14	16	9.3	39	58	9.1	8.2
18	6.9	73	8.6	13	10	13	14	41	38	93	15	9.0
19	6.9	10	8.6	12	10	13	13	57	16	23	13	8.8
20	11	7.5	16	13	14	13	13	22	12	12	8.4	8.2
21	5.5	7.2	97	867	26	13	12	11	11	9.3	9.0	161
22	4.3	6.6	13	75	64	13	10	10	27	7.9	9.1	345
23	5.5	68	9.5	29	36	12	11	94	16	8.8	9.2	27
24	6.3	64	42	406	288	33	12	134	8.2	83	131	14
25	6.3	8.9	154	125	154	28	12	126	9.1	16	18	11
26	18	5.7	19	44	241	13	34	49	9.7	11	10	11
27	67	7.2	12	25	55	12	50	23	9.8	11	16	10
28	8.6	33	10	20	28	12	25	21	10	9.3	20	9.8
29	5.5	30	9.8	18	---	29	14	25	11	56	16	21
30	6.0	57	8.9	16	---	13	11	33	12	14	11	101
31	6.9	---	20	15	---	14	---	27	---	10	9.4	---
TOTAL	387.5	555.7	1087.9	2676	1121.9	1120	718	898.3	653.8	747.2	901.4	1750.0
MEAN	12.5	18.5	35.1	86.3	40.1	36.1	23.9	29.0	21.8	24.1	29.1	58.3
MAX	67	88	291	867	288	420	109	134	120	120	226	752
MIN	4.3	3.7	6.6	12	8.9	12	10	8.4	8.2	7.9	8.1	7.7

CAL YR 1978 TOTAL 11276.9 MEAN 30.9 MAX 593 MIN 3.7
WTR YR 1979 TOTAL 12617.7 MEAN 34.6 MAX 867 MIN 3.7

01393450 ELIZABETH RIVER AT URSINO LAKE, AT ELIZABETH, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--February to September 1979.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
FEB 14...	1300	14	1200	7.8	.5	12.5	1.0	80	200	250	80
APR 05...	1010	19	335	7.6	9.5	10.5	6.0	9400	500	92	30
JUN 06...	1205	18	460	7.5	20.5	5.9	6.4	11000	2800	140	44
JUL 19...	1015	22	270	7.3	--	--	--	7900	5400	88	28
AUG 16...	1220	9.5	650	8.2	21.0	11.2	3.0	400	4300	230	75

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
FEB 14...	13	140	2.6	181	0	148	--	76	220	.1
APR 05...	4.2	26	1.8	63	0	52	--	32	42	.1
JUN 06...	6.8	31	2.7	95	0	78	.0	46	57	.1
JUL 19...	4.4	16	2.5	61	--	50	--	38	23	.1
AUG 16...	11	32	2.4	173	0	142	--	61	69	.1

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHATE, TOTAL (MG/L AS PO4)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
FEB 14...	18	692	3.0	.20	.30	.50	3.5	.47	.31	11
APR 05...	6.3	192	1.5	.20	.30	.50	2.0	.31	.15	8.0
JUN 06...	11	275	1.6	.16	2.1	2.3	3.9	.28	.06	6.8
JUL 19...	7.6	172	1.0	<.10	--	2.1	3.1	.39	.39	7.4
AUG 16...	16	382	2.4	<.10	--	.90	3.3	.29	.27	3.4

DATE	TIME	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	BORON, TOTAL RECOV-ERABLE (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)
JUN 06...	1205	30	3	0	60	7	20	33

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	PHENOLS (UG/L)
JUN 06...	550	35	160	<.5	50	1	150	2

01394500 RAHWAY RIVER NEAR SPRINGFIELD, NJ

LOCATION.--Lat 40°41'11", long 74°18'44", Union County, Hydrologic Unit 02030104, on left bank 50 ft (15 m) downstream from bridge on U.S. Highway 22, 100 ft (30 m) downstream from Pope Brook, and 1.5 mi (2.4 m) south of Springfield.

DRAINAGE AREA.--25.5 mi² (66.0 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1938 to current year.

REVISED RECORDS.--WSP 1622: 1945. WRD-NJ 1973: 1938(M), 1968(M), 1971(M).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 66.17 ft (20.169 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records good. Water for municipal supply diverted from river by city of Orange. The flow past this station is affected by diversions by pumpage from wells by Orange, South Orange, Short Hills Water Co., and Springfield station of Elizabethtown Water Co.

AVERAGE DISCHARGE.--41 years, 28.4 ft³/s (0.804 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,430 ft³/s (154 m³/s) Aug. 2, 1973 (gage height, 9.76 ft or 2.975 m, from floodmark) from rating curve extended above 1,600 ft³/s (35.2 m³/s) on basis of slope-area measurement of peak flow; minimum, 0.1 ft³/s (0.003 m³/s) Sept. 11, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,000 ft³/s (28.3 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage Height (ft)	Gage Height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage Height (ft)	Gage Height (m)
Jan. 21	0945	1510	42.8	6.66	2.030	May 24	0115	1120	31.7	5.80	1.768
Jan. 24	2245	*1540	43.6	6.72	2.048	Sept. 6	0900	1300	36.8	6.22	1.896
Feb. 26	0645	1050	29.7	5.61	1.710						

Minimum discharge, 2.1 ft³/s (0.059 m³/s) Nov. 20,21, 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.8	4.2	5.7	15	18	42	13	15	17	42	5.7	4.1
2	3.4	3.0	3.4	80	15	36	28	14	15	29	9.3	14
3	3.0	3.4	2.8	95	13	31	25	13	76	8.8	24	14
4	20	3.0	28	20	13	26	20	17	38	11	9.3	5.3
5	4.7	2.8	30	13	12	29	28	12	34	9.3	4.4	7.2
6	26	3.4	9.2	11	12	618	15	10	22	7.2	58	653
7	3.0	4.7	5.1	58	11	230	13	9.9	15	7.2	12	32
8	2.5	4.7	51	660	12	65	13	10	12	6.2	6.2	12
9	3.0	3.8	439	68	11	41	80	11	12	7.2	4.4	8.2
10	2.5	3.8	93	28	9.3	32	60	9.3	11	7.7	11	7.7
11	2.5	3.8	18	17	8.8	114	22	9.9	100	6.7	30	7.2
12	3.0	3.0	12	12	9.3	40	17	17	37	9.3	147	6.2
13	2.3	3.0	8.6	38	9.9	26	16	16	15	7.2	46	5.7
14	7.4	3.0	6.8	58	9.9	33	109	22	12	6.7	10	25
15	3.8	4.2	5.7	15	9.9	27	48	11	10	6.2	7.2	15
16	4.2	2.5	4.7	9.9	9.9	19	26	8.2	9.9	7.2	5.7	4.9
17	6.8	43	13	8.6	9.3	17	22	7.2	13	62	5.7	5.3
18	3.8	80	6.2	6.8	9.3	18	18	33	51	85	10	4.9
19	3.8	3.8	6.8	6.2	9.3	15	15	36	11	15	15	5.3
20	7.4	2.3	9.2	5.7	9.3	15	13	31	8.2	6.7	5.7	4.9
21	4.2	2.1	93	1010	13	15	13	11	9.3	6.2	5.3	95
22	3.0	2.1	16	173	42	14	13	9.3	15	6.2	5.3	350
23	3.8	17	8.6	44	26	14	13	238	21	6.2	5.3	19
24	3.8	50	7.0	417	538	29	12	563	8.2	15	63	10
25	3.8	3.4	140	488	384	36	12	494	8.8	9.9	10	8.2
26	13	2.8	30	78	592	17	41	82	8.2	6.2	6.2	8.8
27	40	3.0	10	46	95	13	97	40	7.7	6.2	10	7.7
28	2.3	14	7.0	36	52	11	40	37	7.7	5.3	11	7.2
29	2.3	9.9	6.0	29	---	22	31	31	8.2	32	7.7	11
30	3.0	43	5.0	24	---	14	17	36	7.7	11	7.2	45
31	2.8	---	6.0	21	---	13	---	28	---	6.2	4.9	---
TOTAL	197.9	332.7	1086.8	3591.2	1963.2	1672	890	1881.8	620.9	458.0	562.5	1403.8
MEAN	6.38	11.1	35.1	116	70.1	53.9	29.7	60.7	20.7	14.8	18.1	46.8
MAX	40	80	439	1010	592	618	109	563	100	85	147	653
MIN	2.3	2.1	2.8	5.7	8.8	11	12	7.2	7.7	5.3	4.4	4.1

CAL YR 1978 TOTAL 14546.9 MEAN 39.9 MAX 849 MIN 2.1
WTR YR 1979 TOTAL 14660.8 MEAN 40.2 MAX 1010 MIN 2.1

01394500 RAHWAY RIVER NEAR SPRINGFIELD, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1978 to September 1979.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
FEB 14...	1050	9.9	750	7.5	1.0	12.5	3.3	220	80	190	57
APR 03...	1105	18	410	7.2	10.0	10.4	2.7	540	350	110	34
JUN 06...	0930	21	320	7.4	18.5	6.1	4.2	>24000	5400	98	30
JUL 18...	1025	18	205	7.1	22.5	4.8	8.2	>24000	>24000	61	19
AUG 13...	1000	41	250	7.4	16.0	8.5	3.8	>24000	9200	71	21

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
FEB 14...	11	63	1.7	115	0	94	--	49	130	.0
APR 03...	6.7	31	1.5	76	0	62	--	34	55	.0
JUN 06...	5.5	19	2.5	71	0	58	.0	28	40	.1
JUL 18...	3.3	11	2.5	44	0	36	--	19	20	.1
AUG 13...	4.6	18	1.5	54	0	44	--	19	31	.1

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHATE, TOTAL (MG/L AS PO4)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
FEB 14...	18	444	2.3	<.10	--	.90	3.2	.06	.06	1.3
APR 03...	12	225	1.4	<.10	--	.30	1.7	.11	.11	6.1
JUN 06...	11	206	1.2	.15	1.8	1.9	3.1	.23	.09	4.2
JUL 18...	6.8	134	2.1	.30	1.8	2.1	4.2	.50	.50	--
AUG 13...	9.4	148	1.0	.17	.73	.90	1.9	.17	.14	5.0

DATE	TIME	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	BORON, TOTAL RECOV-ERABLE (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)
JUN 06...	0930	20	4	0	190	1	20	20

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	PHENOLS (UG/L)
JUN 06...	550	26	100	<.5	11	0	30	0

01395000 RAHWAY RIVER AT RAHWAY, NJ

LOCATION.--Lat 40°37'05", long 74°17'00", Union County, Hydrologic Unit 02030104, on left bank 100 ft (30 m) upstream from St. Georges Avenue bridge in Rahway and 0.9 mi (1.4 km) upstream from Robinsons Branch.

DRAINAGE AREA.--40.9 mi² (105.9 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1908 to April 1915 (gage heights and discharge measurements only), October 1921 to current year.

REVISED RECORDS.--WSP 781: Drainage area. WSP 1552: 1922-23(M), 1924, 1930-31(M), 1937.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 8.77 ft (2.673 m) National Geodetic Vertical Datum of 1929. Prior to Aug. 25, 1934, nonrecording gage at site 40 ft (12 m) downstream from Church Street and 1,500 ft (460 m) downstream from present site at datum 2.77 ft (0.844 m) lower.

REMARKS.--Water-discharge records fair except those for winter periods, which are poor. Water for municipal supply diverted from river by Rahway and Orange. The flow past this station is affected by diversions by pumpage from wells by Orange, South Orange, Short Hills Water Co., and Springfield station of Elizabethtown Water Co.

AVERAGE DISCHARGE.--58 years (1921-79), 47.0 ft³/s (1.331 m³/s), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,420 ft³/s (153 m³/s) Aug. 2, 1973, gage height, 7.88 ft (2.402 m) from rating curve extended above 3,000 ft³/s (85 m³/s); no flow part or all of some days in many years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 600 ft³/s (17.0 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage Height (ft)	Gage Height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage Height (ft)	Gage Height (m)
Dec. 9	2345	787	22.3	3.42	1.042	Mar. 6	2230	1570	44.5	4.47	1.362
Jan. 8	1315	1420	40.2	4.31	1.314	May 23	2345	2140	60.6	5.13	1.564
Jan. 21	Unknown	2500	70.8	Unknown		July 17	2230	630	17.8	3.13	0.954
Jan. 24	Unknown	*2680	75.9	a5.67	1.728	Sept. 6	0815	1570	44.5	4.47	1.362
Feb. 24	Unknown	1400	39.6	Unknown		Sept. 22	Unknown	1400	39.6	Unknown	
Feb. 26	Unknown	1700	48.1	Unknown							

a- From maximum indicator.

Minimum daily discharge, 0.08 ft³/s (0.002 m³/s) Nov. 13, 16.

REVISIONS.--Revised daily discharges, in cubic feet per second, for water year 1978 are given below. These figures supersede those published in the report for 1978:

Sept. 20	44	Sept. 23	16	Sept. 26	5.5	Sept. 29	4.5
21	14	24	7.3	27	6.7	30	4.5
22	9.8	25	5.5	28	5.0		

Month	Total	Mean	Max	Min
September 1978	808.3	26.9	214	0.6
Wtr Yr 1978	28649.6	78.5	2620	0.6

RAHWAY RIVER BASIN

01395000 RAHWAY RIVER AT RAHWAY, NJ--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.5	19	24	63	26	73	21	22	33	69	7.9	1.3
2	11	7.9	11	258	19	36	39	21	26	84	9.8	3.7
3	4.1	4.5	6.7	320	14	52	41	19	93	14	18	44
4	26	3.7	61	47	11	44	56	23	90	14	32	16
5	29	3.3	67	27	9.0	45	41	20	45	16	9.8	6.6
6	54	1.0	22	23	7.0	830	17	15	60	9.2	22	1060
7	14	2.9	9.2	51	6.7	776	19	13	27	7.3	81	221
8	7.3	2.6	26	977	6.5	134	17	14	21	7.3	8.5	23
9	35	3.3	520	286	6.2	52	115	14	19	5.0	5.5	17
10	6.7	.70	380	58	6.0	52	142	12	17	7.9	14	18
11	4.5	.40	45	36	5.9	188	42	11	104	8.5	42	9.8
12	4.5	.16	24	24	5.8	75	29	21	142	6.7	270	8.5
13	6.7	.08	18	45	5.8	45	26	31	28	7.9	175	6.7
14	11	.32	9.2	117	5.9	45	181	38	19	5.5	26	14
15	13	.16	9.8	39	6.0	45	115	32	15	13	12	41
16	9.2	.08	5.0	21	6.2	33	47	14	14	18	7.9	10
17	6.1	38	27	17	6.7	27	36	9.8	22	47	6.0	6.0
18	5.5	175	11	17	7.5	27	29	39	84	258	.72	3.0
19	2.6	24	8.5	10	9.0	24	26	81	60	67	17	3.0
20	6.1	6.1	9.2	9.0	11	26	22	69	14	18	21	3.0
21	9.2	4.1	172	1700	20	23	19	21	14	2.0	5.2	150
22	4.1	3.7	38	250	70	20	18	15	13	6.1	4.8	550
23	5.0	7.9	18	60	40	20	19	383	41	17	4.5	50
24	4.1	107	22	700	700	28	17	1250	13	7.3	100	12
25	1.0	19	357	1000	500	75	18	1000	17	14	41	6.0
26	4.5	12	65	160	600	27	35	235	15	2.3	8.7	6.5
27	102	6.1	28	75	254	21	191	79	11	11	13	6.0
28	13	6.7	17	54	95	16	61	52	1.4	4.5	19	5.0
29	4.5	23	14	44	---	31	58	58	.85	29	8.7	10
30	3.7	95	12	35	---	24	31	86	7.9	54	1.3	60
31	4.1	---	13	28	---	20	---	56	---	9.8	.73	---
TOTAL	416.0	575.70	2049.6	6551.0	2460.2	2934	1528	3713.8	1067.15	840.3	993.05	2371.1
MEAN	13.4	19.2	66.1	211	87.9	94.6	50.9	120	35.6	27.1	32.0	79.0
MAX	102	175	520	1700	700	830	191	1250	142	258	270	1060
MIN	1.0	.08	5.0	9.0	5.8	16	17	9.8	.85	2.0	.72	1.3

CAL YR 1978 TOTAL 22510.00 MEAN 61.7 MAX 1700 MIN .08
WTR YR 1979 TOTAL 25499.90 MEAN 69.9 MAX 1700 MIN .08

NOTE.--No gage-height record Jan. 20-24.

01395000 RAHWAY RIVER AT RAHWAY, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1923-24, 1952, 1962, 1967-70, and 1979.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health. Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
FEB 13...	1100	E11	630	7.8	.5	13.8	2.7	20	<20	180	56
MAR 20...	1120	27	415	8.6	9.5	14.8	1.9	170	2	130	40
MAY 23...	1130	44	270	7.7	18.0	8.3	5.0	16000	9200	88	27
JUL 06...	0925	9.2	250	7.6	18.5	8.0	2.8	1300	>2400	84	26
AUG 06...	1025	6.7	390	7.9	25.5	7.8	3.6	790	330	140	43

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
FEB 13...	10	44	1.9	117	0	96	--	54	92	.1
MAR 20...	7.7	28	1.7	81	2	70	--	41	51	.1
MAY 23...	5.0	15	2.4	73	0	60	.0	27	27	.1
JUL 06...	4.6	12	2.1	66	0	54	--	27	20	.1
AUG 06...	7.4	18	2.4	105	0	86	--	40	32	.1

DATE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHATE, TOTAL (MG/L AS PO4)	PHOSPHATE, ORTHO, DISSOLVED (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
FEB 13...	17	370	2.0	.20	.50	.70	2.7	.01	.01	2.0
MAR 20...	11	231	1.0	<.10	--	.60	1.6	.13	.06	4.8
MAY 23...	8.5	164	<1.0	<.10	--	.90	--	.28	.12	7.3
JUL 06...	6.7	162	.79	.90	3.0	3.9	4.7	.19	.19	8.8
AUG 06...	10	236	1.1	<.10	--	1.0	2.1	.18	.13	8.3

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
MAY 23...	1130	50	2	0	30	0	30	12

DATE	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	PHENOLS (UG/L)
MAY 23...	1000	51	230	<.5	5	0	30	0

01396001 ROBINSONS BRANCH RAHWAY RIVER AT MAPLE AVENUE AT RAHWAY, NJ

LOCATION.--Lat 40°36'26", long 74°17'40", Union County, Hydrologic Unit 02030104, on right upstream abutment of bridge on Maple Avenue in Rahway, 2,000 ft (610 m) downstream from Milton Lake, 1.0 mi (1.6 km) downstream from Middlesex Reservoir dam, and 1.2 mi (1.9 km) upstream from mouth.

DRAINAGE AREA.--21.5 mi² (55.9 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1939 to current year. Prior to October 1, 1978, published as "Robinsons Branch Rahway River at Rahway, NJ" (sta 01396000).

REVISED RECORDS.--WDR-NJ-75-1: 1973(P).

GAGE.--Water-stage recorder. Datum of gage is 11.3 ft (3.44 m) National Geodetic Vertical Datum of 1929 (levels from New Jersey Geological Survey bench mark). Prior to Sept. 26, 1978, water-stage recorder above Milton Dam at datum 8.69 ft (2.649 m) higher.

REMARKS.--Water-discharge records good. Water diverted for municipal supply by Middlesex Water Co., from Middlesex Reservoir, capacity, 300,000,000 gal (1.136 hm³), 1.0 mi (1.6 km) above station. No diversion during the year.

AVERAGE DISCHARGE.--40 years, 25.2 ft³/s (0.714 m³/s), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,110 ft³/s (88.1 m³/s) July 15, 1975, gage height, 5.85 ft (1.783 m) from rating curve extended above 750 ft³/s (21 m³/s) on basis of flow over dam computation (site and datum then in use); maximum gage height, 6.02 ft (1.835 m) Aug. 15, 1969 (site and datum then in use); no flow many times.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 450 ft³/s (12.7 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage Height (ft)	Gage Height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage Height (ft)	Gage Height (m)
Jan. 8	1115	676	19.1	3.84	1.170	Mar. 6	1415	747	21.2	4.11	1.253
Jan. 21	0730	1120	31.7	5.59	1.704	May 23	2315	*1470	41.6	7.11	2.167
Jan. 24	2100	885	25.1	4.64	1.414	Sept. 6	0815	1140	32.3	5.69	1.734
Feb. 26	0545	982	27.8	5.03	1.533	Sept. 22	0200	591	16.7	3.51	1.070

No flow part or all of some days in October, November, August and September.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.01	.01	16	40	14	45	10	11	18	32	3.5	.10
2	.30	.00	12	207	12	40	15	10	13	32	9.6	.10
3	.00	.00	8.2	158	10	32	18	11	24	7.6	29	.70
4	.47	.00	49	29	8.0	25	17	14	53	6.0	30	.10
5	.00	.00	52	16	6.0	26	29	12	33	7.6	8.2	.30
6	.70	.89	18	15	5.8	529	16	11	24	2.7	11	412
7	.00	1.9	12	39	5.0	335	9.6	11	14	2.3	14	116
8	.30	2.7	25	529	6.0	72	9.6	12	12	1.9	4.6	17
9	.89	1.9	319	173	5.0	32	58	12	11	1.6	2.7	7.1
10	1.1	1.6	140	60	4.5	24	68	10	9.6	1.9	16	5.3
11	1.4	1.9	24	40	3.5	111	19	8.9	76	2.3	27	4.9
12	1.9	2.3	9.6	15	3.5	40	15	14	63	2.7	144	3.4
13	1.9	2.3	12	23	3.4	24	12	14	16	2.3	89	3.4
14	3.1	3.5	9.6	49	3.3	25	122	20	9.6	7.6	15	12
15	5.3	7.6	7.6	26	3.2	20	73	15	8.2	4.6	7.6	24
16	2.3	3.5	7.6	16	3.3	14	26	8.2	7.6	1.9	4.0	5.7
17	1.6	17	19	12	3.4	15	18	4.6	19	29	3.1	3.4
18	4.0	69	9.6	11	3.7	13	16	25	47	111	3.5	3.4
19	7.6	16	7.6	11	4.0	12	13	79	18	19	12	4.9
20	6.8	8.9	8.9	11	3.6	12	10	78	8.2	6.0	4.0	.67
21	3.5	5.3	104	752	6.0	10	9.6	21	6.8	4.0	4.0	24
22	2.7	4.0	27	406	18	10	9.6	12	7.6	3.1	3.1	260
23	3.5	8.2	14	78	15	10	9.6	216	10	2.7	3.1	40
24	3.5	53	18	248	359	16	9.6	736	6.8	3.1	59	12
25	1.4	13	240	439	496	39	11	632	4.0	2.7	31	8.3
26	2.7	6.0	45	120	607	16	19	215	3.5	3.1	6.8	6.6
27	49	5.3	18	44	202	11	72	47	3.5	3.5	5.3	6.2
28	5.3	15	15	31	69	9.6	26	25	4.0	2.3	5.3	5.7
29	2.3	17	12	26	---	14	25	27	8.2	31	1.4	14
30	1.6	57	9.6	18	---	12	13	68	6.0	25	1.1	154
31	1.6	---	10	17	---	10	---	36	---	4.6	.10	---
TOTAL	116.77	324.80	1279.3	3659	1883.2	1603.6	778.6	2415.7	544.6	367.1	558.0	1155.27
MEAN	3.77	10.8	41.3	118	67.3	51.7	26.0	77.9	18.2	11.8	18.0	38.5
MAX	49	69	319	752	607	529	122	736	76	111	144	412
MIN	.00	.00	7.6	11	3.2	9.6	9.6	4.6	3.5	1.6	.10	.10

CAL YR 1978 TOTAL 13033.97 MEAN 35.7 MAX 711 MIN .00
WTR YR 1979 TOTAL 14685.94 MEAN 40.2 MAX 752 MIN .00

01396001 ROBINSONS BRANCH RAHWAY RIVER AT MAPLE AVENUE, AT RAHWAY, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--February to September 1979.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
FEB 13...	1300	6.8	260	7.5	1.0	14.1	2.4	<20	20	78	24
MAR 20...	0940	12	258	7.9	8.0	14.6	1.8	79	4	81	25
MAY 23...	0910	9.6	325	7.7	19.5	7.0	4.0	460	490	120	37
JUL 18...	1210	53	300	7.9	25.5	7.6	6.0	1400	5400	120	36
AUG 06...	1145	3.5	290	8.6	27.5	11.6	3.4	170	220	110	33

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
FEB 13...	4.3	12	2.1	49	0	40	--	36	22	.1
MAR 20...	4.4	14	1.9	54	0	44	--	37	21	.1
MAY 23...	6.3	14	2.4	98	0	80	.0	42	21	.1
JUL 18...	6.1	13	1.9	93	0	76	--	38	21	.1
AUG 06...	5.6	13	2.2	78	2	67	--	37	19	.1

DATE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHATE, TOTAL (MG/L AS PO4)	PHOSPHATE, ORTHO, DISSOLVED (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
FEB 13...	8.2	146	1.3	.30	.80	1.1	2.4	.21	.19	5.9
MAR 20...	8.1	152	1.2	<.10	--	.69	1.9	.18	.18	6.2
MAY 23...	5.0	208	<1.0	<.10	--	1.0	--	.13	.08	11
JUL 18...	5.6	192	<1.0	<.10	--	2.6	--	.22	.21	9.0
AUG 06...	4.0	186	.44	<.10	--	.90	1.3	.41	.02	7.1

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
MAY 23...	0910	30	1	0	80	1	20	5

DATE	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	PHENOLS (UG/L)
MAY 23...	180	0	140	<.5	1	0	10	0

01396090 SOUTH BRANCH RARITAN RIVER AT OUTLET OF BUDD LAKE, NJ

LOCATION.--Lat 40°51'38", long 74°45'38", Morris County, Hydrologic Unit 02030105, at bridge on Smithtown Road, 200 ft (60 m) northwest of U.S. Route 46 and 0.5 mi (0.8 km) downstream from Budd Lake dam.

DRAINAGE AREA.--5.03 mi^2 (13.03 km^2).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1965, 1977 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L)	COLI- FORM, FECAL, EC BROTH (MPN)	STREP- TOCOCCI FECAL (MPN)	HARD- NESS (MG/L AS CACO3)
JAN 22...	1030	185	7.1	1.0	10.8	--	<20	17	46
MAR 19...	1015	180	7.5	2.5	12.3	--	50	<2	38
MAY 15...	1015	172	7.4	18.0	7.9	3.0	170	<2	44
AUG 01...	1040	162	7.0	24.0	3.9	4.0	1300	350	47

DATE	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)
JAN 22...	12	4.0	15	.9	21	--	16	27	.1
MAR 19...	9.6	3.3	16	.9	20	--	12	29	.1
MAY 15...	11	3.9	16	1.0	17	.0	15	28	.1
AUG 01...	12	4.1	15	1.0	30	--	8.3	25	.1

DATE	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHATE, TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
JAN 22...	4.1	107	<1.0	<.10	--	1.0	.11	5.8
MAR 19...	5.6	89	<1.0	<.10	--	.50	.12	3.7
MAY 15...	1.9	100	<1.0	.20	1.0	1.2	.17	12
AUG 01...	6.8	132	<1.0	<.10	--	2.2	.21	17

DATE	TIME	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE)	BORON, TOTAL RECOV- ERABLE (UG/L AS B)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)
MAY 15...	1015	30	12	0	0	1	30	6

DATE	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI)	SELE- NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	PHENOLS (UG/L)
MAY 15...	860	8	130	<.5	15	0	20	2

01396280 SOUTH BRANCH RARITAN RIVER AT MIDDLE VALLEY, NJ

LOCATION.--Lat 40°45'40", long 74°49'18", Morris County. Hydrologic Unit 02030105, at bridge on Middle Valley Road in Middle Valley, 6.9 mi (11.1 km) downstream from Drakes Brook.

DRAINAGE AREA.--47.6 mi² (123.3 km²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1964-65, 1967, 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L)	COLI- FORM, FECAL, EC BROTH (MPN)	STREP- TOCOCCI FECAL (MPN)	HARD- NESS (MG/L AS CACO3)
JAN 22...	1230	198	8.0	1.0	12.9	--	9200	>2400	34
MAR 19...	1145	198	7.6	5.0	12.7	--	<20	4	58
MAY 15...	1300	195	8.4	17.0	11.6	2.0	3500	33	67
AUG 01...	1230	230	7.9	20.0	9.5	2.0	230	41	88

DATE	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)
JAN 22...	8.3	3.3	19	1.2	17	--	10	32	.1
MAR 19...	13	6.3	11	1.1	36	--	13	19	.1
MAY 15...	15	7.1	10	1.3	45	.0	12	18	.0
AUG 01...	19	9.9	9.8	1.4	81	--	11	16	.1

DATE	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	PHOS- PHATE, TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
JAN 22...	6.6	95	<1.0	.20	.82	1.0	--	.18	3.5
MAR 19...	12	98	1.3	.20	.50	.70	2.0	.50	5.0
MAY 15...	12	113	1.0	<.10	--	1.0	2.0	.22	3.6
AUG 01...	12	154	.94	<.10	--	.80	1.7	.40	8.2

DATE	TIME	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE)	BORON, TOTAL RECOV- ERABLE (UG/L AS B)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)
MAY 15...	1300	30	1	0	80	0	20	4

DATE	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI)	SELE- NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	PHENOLS (UG/L)
MAY 15...	400	4	20	<.5	9	0	20	2

01396500 SOUTH BRANCH RARITAN RIVER NEAR HIGH BRIDGE, NJ

LOCATION.--Lat 40°40'40", long 74°52'46", Hunterdon County, Hydrologic Unit 02030105, on left bank 1.0 mi (1.6 km) northeast of High Bridge, and 4.4 mi (7.1 km) upstream from Spruce Run.

DRAINAGE AREA.--65.3 mi^2 (169.1 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1918 to current year. Monthly discharge only for some periods, published in WSP 1302.

REVISED RECORDS.--WSP 601: 1924. WSP 781: Drainage area. WSP 1552: 1919(M), 1920(M), 1921, 1923, 1924(M), 1927-28(M), 1934(M), 1941(M).

GAGE.--Water-stage recorder. Concrete control since Sept. 28, 1930. Datum of gage is 282.10 ft (85.984 m) National Geodetic Vertical Datum of 1929 (levels from New Jersey Geological Survey bench mark). Prior to Sept. 30, 1921, reference point at same site and datum.

REMARKS.--Water-discharge records good. Slight diurnal fluctuation caused by small powerplant above station.

AVERAGE DISCHARGE.--61 years, 121 ft^3/s (3.427 m^3/s), 25.17 in/yr (639 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,910 ft^3/s (196 m^3/s) Jan. 25, 1979, gage height, 12.07 ft (3.679 m); maximum gage height, 12.23 ft (3.728 m) Feb. 24, 1979 (ice jam); minimum discharge, 6.6 ft^3/s (0.19 m^3/s) Oct. 11, 1930; minimum daily 13 ft^3/s (0.37 m^3/s) Aug. 11, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,000 ft^3/s (28.3 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage Height (ft)	Gage Height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage Height (ft)	Gage Height (m)
Jan. 8	1115	1640	46.4	9.13	2.783	Feb. 26	0445	2060	58.3	9.49	2.893
Jan. 21	1830	2380	67.4	9.74	2.969	Mar. 6	2130	1170	33.1	8.64	2.633
Jan. 25	0345	*6910	196.0	12.07	3.679	Sept. 6	1530	2560	72.5	9.87	3.008
Feb. 24	1230	ice jam		*12.23	3.728	Sept. 22	0845	1300	36.8	8.79	2.679

Minimum discharge, 40 ft^3/s (1.13 m^3/s) Nov. 15, gage height, 5.83 ft (1.777 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	43	43	81	222	219	313	152	145	161	88	56	62
2	43	42	65	590	184	313	171	134	143	83	55	57
3	42	42	60	505	166	266	189	145	184	78	166	83
4	47	42	83	192	156	224	192	161	194	75	224	66
5	66	42	111	169	140	266	197	136	154	85	84	62
6	51	42	77	149	115	670	156	123	134	73	66	1500
7	50	42	63	166	112	614	136	117	123	69	66	424
8	46	41	63	1190	110	320	132	113	113	66	59	186
9	44	41	316	360	102	263	192	110	110	64	54	136
10	44	41	248	236	100	254	275	106	106	63	55	115
11	43	41	106	205	98	483	192	101	457	63	59	104
12	43	41	85	176	96	269	164	101	331	62	189	94
13	42	41	78	186	96	224	147	121	176	59	257	90
14	44	41	77	275	94	227	236	127	140	59	104	101
15	47	41	69	194	90	210	239	125	123	69	83	192
16	44	41	66	147	84	179	184	104	113	85	71	101
17	43	43	69	132	76	176	166	94	110	179	66	88
18	42	83	66	129	76	169	152	97	113	87	65	84
19	42	65	60	99	78	156	140	140	101	80	74	81
20	43	54	62	125	80	149	134	147	93	65	68	75
21	44	51	161	1460	100	143	129	111	90	88	62	132
22	43	49	102	845	200	138	123	97	88	66	58	887
23	42	49	77	289	180	136	115	169	101	62	57	251
24	42	102	70	1130	400	263	111	686	87	62	71	169
25	41	70	171	3340	800	364	110	614	83	58	80	143
26	42	57	121	665	1600	208	132	334	77	57	66	129
27	56	52	90	466	470	176	457	245	74	62	63	115
28	52	52	83	395	316	159	245	213	78	55	57	108
29	46	55	111	323	---	174	202	194	91	63	69	108
30	44	90	140	279	---	166	169	202	104	78	147	121
31	43	---	84	245	---	154	---	189	---	59	74	---
TOTAL	1404	1536	3115	14884	6338	7826	5339	5501	4052	2262	2725	5864
MEAN	45.3	51.2	100	480	226	252	178	177	135	73.0	87.9	195
MAX	66	102	316	3340	1600	670	457	686	457	179	257	1500
MIN	41	41	60	99	76	136	110	94	74	55	54	57
CFSM	.69	.78	1.53	7.35	3.46	3.86	2.73	2.71	2.07	1.12	1.35	2.99
IN.	.80	.88	1.77	8.48	3.61	4.46	3.04	3.13	2.31	1.29	1.55	3.34

CAL YR 1978 TOTAL 49505 MEAN 136 MAX 1590 MIN 41 CFSM 2.08 IN 28.20
WTR YR 1979 TOTAL 60846 MEAN 167 MAX 3340 MIN 41 CFSM 2.56 IN 34.66

01396500 SOUTH BRANCH RARITAN RIVER NEAR HIGH BRIDGE, NJ

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1961 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1968 to September 1979 (discontinued).
WATER TEMPERATURES: October 1960 to September 1979 (discontinued).

INSTRUMENTATION.--Temperature recorder since October 1960, water-quality monitor from October 1968 to September 1979.

REMARKS.--Missing continuous water-quality records are the result of malfunction of instrument.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 337 micromhos Feb. 24, 1979; minimum, 45 micromhos Mar. 20, 1975.
WATER TEMPERATURES: Maximum, 28.0°C July 3, 1966; minimum, 0.0°C on several days during February 1979.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 337 micromhos Feb. 24; minimum, 59 micromhos Sept. 5.
WATER TEMPERATURES: Maximum, 24.5°C on several days during July, August; minimum, 0.0°C on several days during February.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	---	---	---	233	220	229	245	224	231	213	171	197
2	---	---	---	233	220	230	233	225	227	167	126	144
3	235	230	---	232	220	229	229	223	225	145	118	128
4	239	222	231	233	216	227	226	211	220	168	147	160
5	225	201	214	234	215	229	211	195	201	177	168	174
6	214	199	205	233	215	227	207	199	203	183	176	179
7	220	215	218	233	211	225	220	208	214	184	174	182
8	221	217	219	236	224	233	226	216	223	165	100	124
9	225	222	223	235	214	228	216	132	171	154	119	139
10	228	224	225	233	215	228	165	132	148	170	123	147
11	232	227	229	235	213	228	196	167	183	181	136	156
12	236	231	233	236	218	231	210	198	207	160	148	155
13	239	232	236	238	227	234	212	206	210	208	157	177
14	239	227	234	238	226	233	213	209	211	286	212	256
15	231	228	230	241	227	233	213	209	211	249	210	227
16	231	221	226	241	224	235	216	213	216	212	198	206
17	230	226	227	239	231	236	219	213	216	200	194	196
18	234	228	232	233	201	219	220	212	216	194	178	190
19	235	231	233	202	193	198	229	216	224	210	180	201
20	234	226	231	212	203	207	230	217	225	208	191	196
21	235	230	232	217	212	214	271	210	229	221	107	151
22	230	225	228	218	211	215	243	218	226	171	107	140
23	237	227	232	220	212	217	221	215	217	179	166	174
24	238	230	236	213	180	199	215	201	210	185	84	149
25	241	229	234	192	178	183	225	191	205	95	69	81
26	237	228	233	203	194	199	219	207	215	138	100	118
27	229	219	224	206	202	204	224	216	220	144	137	142
28	229	216	223	220	207	211	223	219	221	139	133	137
29	227	214	218	237	222	230	228	218	223	143	137	140
30	229	220	225	252	227	238	228	217	223	146	144	145
31	229	218	226	---	---	---	218	211	216	150	147	149
MONTH	241	199	227	252	178	222	271	132	212	286	69	163

01396500 SOUTH BRANCH RARITAN RIVER NEAR HIGH BRIDGE, NJ

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	155	151	153	167	163	165	173	169	171	174	170	172
2	164	155	160	162	159	160	172	165	169	175	171	173
3	170	162	166	166	159	162	164	158	161	175	170	173
4	172	166	169	170	166	168	158	154	156	173	167	170
5	178	170	174	169	163	166	158	156	157	175	169	173
6	187	181	184	162	128	150	165	159	162	181	173	176
7	188	181	184	150	126	139	170	164	167	185	178	180
8	187	184	186	157	149	154	172	168	170	187	180	183
9	191	186	188	161	157	159	170	152	165	191	183	186
10	199	191	195	162	159	161	152	139	144	195	187	190
11	202	193	198	156	146	150	167	153	162	196	190	193
12	203	199	201	163	151	158	169	165	167	194	191	193
13	203	200	202	167	161	165	169	168	169	187	178	182
14	206	202	204	166	162	164	169	147	161	178	171	175
15	205	193	200	166	161	164	154	145	148	172	169	170
16	205	195	201	170	165	168	164	155	160	204	171	195
17	203	197	201	171	168	169	167	164	165	212	200	206
18	206	201	204	174	168	172	170	166	168	207	200	204
19	204	199	201	175	172	173	172	169	171	199	183	189
20	202	198	200	175	172	174	174	172	173	183	169	172
21	211	202	206	175	173	174	177	173	175	187	170	179
22	239	209	218	175	172	174	179	176	177	195	185	191
23	321	237	282	177	174	175	181	178	179	195	141	183
24	337	152	250	176	139	166	182	179	180	138	95	110
25	146	126	131	155	133	143	185	181	183	119	95	106
26	126	107	115	163	155	160	186	168	183	146	120	137
27	160	125	145	166	162	164	160	121	134	158	145	153
28	186	162	176	169	164	166	156	138	148	163	156	161
29	---	---	---	168	165	166	163	156	159	167	161	164
30	---	---	---	167	162	164	170	163	167	162	156	159
31	---	---	---	171	164	166	---	---	---	166	158	162
MONTH	337	107	189	177	126	163	186	121	165	212	95	173

01396500 SOUTH BRANCH RARITAN RIVER NEAR HIGH BRIDGE, NJ

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	171	159	---	202	182	190	246	239	242	235	228	233
2	---	---	---	208	201	204	251	245	247	240	228	234
3	---	---	---	216	204	211	252	119	218	227	204	211
4	---	---	---	216	210	212	165	112	141	233	210	221
5	---	---	---	211	206	208	208	169	191	236	59	138
6	---	---	---	213	202	208	226	209	219	137	61	104
7	---	---	---	221	212	217	238	225	232	173	139	159
8	---	---	---	224	218	221	246	235	240	190	174	182
9	---	---	---	228	223	224	250	245	247	199	190	194
10	---	---	---	234	227	229	250	236	244	205	198	201
11	---	---	---	233	227	230	247	185	227	210	203	205
12	---	---	---	235	229	231	179	130	144	215	208	210
13	---	---	---	242	234	236	188	143	166	216	195	213
14	---	---	---	240	232	237	211	189	200	194	142	162
15	---	---	---	244	226	237	226	213	219	191	151	174
16	---	---	---	233	158	213	232	226	228	205	193	199
17	---	---	---	185	161	169	236	231	234	214	206	209
18	---	---	---	203	175	191	232	229	230	216	211	214
19	---	---	---	214	204	211	231	227	229	218	213	215
20	---	---	---	222	212	216	238	231	236	221	188	216
21	---	---	---	223	173	195	242	234	239	176	82	109
22	---	---	---	223	177	208	244	234	239	147	105	130
23	---	---	---	232	223	226	246	221	237	170	148	160
24	---	---	---	234	222	228	222	204	215	178	170	174
25	---	---	---	239	234	235	222	213	219	182	178	180
26	---	---	---	240	236	238	234	225	231	186	182	184
27	220	213	---	238	234	236	238	229	236	190	185	188
28	219	203	213	238	229	233	246	234	241	191	189	190
29	212	202	207	240	214	230	232	155	187	192	184	187
30	202	187	195	224	215	221	205	164	186	187	149	177
31	---	---	---	238	222	228	227	207	218	---	---	---
MONTH	220	159	205	244	158	218	252	112	219	240	59	186

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	---	---	---	9.5	7.5	8.5	4.5	3.5	4.0	4.5	2.0	3.5
2	---	---	---	9.0	6.5	8.0	4.5	3.5	4.0	5.5	4.5	5.5
3	14.0	13.5	---	9.0	6.5	8.0	4.0	3.5	4.0	5.0	.0	2.0
4	14.0	13.0	13.0	9.0	7.0	8.0	6.5	4.0	5.5	.0	.0	.0
5	14.0	13.0	13.5	9.0	7.0	8.0	6.5	6.0	6.5	.0	.0	.0
6	15.5	13.5	14.5	9.0	7.0	8.0	6.0	5.0	5.5	.5	.0	.0
7	14.0	12.5	13.0	9.5	8.0	9.0	5.5	4.5	5.0	1.5	.5	1.0
8	12.0	10.0	10.5	9.5	8.5	8.5	6.5	5.5	6.0	1.5	.5	1.0
9	10.5	8.0	9.0	8.5	6.5	7.5	8.5	5.5	7.0	.5	.0	.0
10	11.0	7.5	9.5	8.0	6.0	7.5	5.0	1.5	3.5	.0	.0	.0
11	12.5	9.0	11.0	9.5	8.0	8.5	1.5	.5	.5	.0	.0	.0
12	14.5	12.5	13.5	9.0	8.0	8.5	1.5	.0	1.0	.0	.0	.0
13	15.5	12.5	14.0	8.5	7.5	8.0	3.0	1.0	2.0	1.5	.0	.5
14	14.5	13.0	14.0	10.5	8.0	9.0	2.5	1.0	2.0	2.5	1.0	1.5
15	12.5	10.0	11.0	10.5	9.0	10.0	2.5	1.0	1.5	1.0	.0	.0
16	10.5	8.0	9.5	9.5	8.5	9.0	3.0	1.0	2.0	1.0	.0	.5
17	10.0	8.5	9.5	9.0	7.0	8.0	3.5	2.5	3.0	.5	.0	.0
18	9.0	6.5	8.0	11.0	9.0	10.5	3.0	1.0	2.0	.5	.0	.5
19	10.5	8.5	9.5	10.0	8.5	9.0	1.0	.0	.0	1.0	.0	.0
20	10.5	9.5	10.0	8.0	6.5	7.0	.5	.0	.0	.0	.0	.0
21	10.5	8.0	9.5	6.5	5.5	6.0	3.0	.5	2.0	.5	.0	.0
22	11.0	8.5	10.0	5.5	5.0	5.5	2.5	1.0	1.5	1.5	.5	1.0
23	12.5	10.0	11.0	5.5	5.0	5.5	1.5	.5	1.0	2.5	.5	1.5
24	11.5	8.5	9.5	7.0	5.5	6.5	1.5	.0	1.0	3.0	.5	2.0
25	9.5	7.5	8.5	6.5	5.5	6.0	2.5	1.5	2.0	1.0	.0	.5
26	10.5	9.0	10.0	5.5	4.0	4.5	1.5	.0	1.0	3.0	1.0	2.0
27	10.5	9.5	10.5	4.0	2.5	3.0	1.0	.0	.5	3.5	2.5	3.0
28	10.0	8.0	9.0	3.5	3.0	3.0	.0	.0	.0	3.5	2.5	3.0
29	9.5	8.0	8.5	3.5	2.5	3.0	.0	.0	.0	3.5	2.5	3.0
30	8.5	6.5	8.0	4.5	3.5	4.0	.0	.0	.0	3.0	2.0	2.5
31	9.5	8.0	8.5	---	---	---	2.0	.0	.5	3.0	2.0	2.5
MONTH	15.5	6.5	10.5	11.0	2.5	7.0	8.5	.0	2.5	5.5	.0	1.0

01396500 SOUTH BRANCH RARITAN RIVER NEAR HIGH BRIDGE, NJ

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	1.5	.0	---	4.5	1.5	3.5	14.5	12.0	13.0	17.0	13.0	15.0
2	.5	.0	---	5.0	3.5	4.5	12.5	8.5	10.0	16.0	11.5	14.0
3	.5	.0	---	4.5	3.5	4.0	9.0	8.0	8.5	14.5	12.5	13.5
4	1.5	.0	---	4.5	3.5	4.0	8.0	6.5	7.0	15.5	14.0	14.5
5	.5	.0	---	6.5	4.0	5.5	8.5	6.5	7.5	15.5	12.0	14.0
6	.0	.0	.0	6.5	4.0	5.5	9.0	6.0	7.5	15.5	12.0	14.0
7	.0	.0	.0	5.5	3.5	4.5	8.5	5.0	6.5	17.5	12.5	15.0
8	.0	.0	.0	6.0	3.0	5.0	8.0	5.0	6.5	19.5	14.5	17.0
9	.0	.0	.0	6.5	4.0	5.5	7.0	5.5	6.0	22.0	17.0	19.5
10	.0	.0	.0	6.0	5.5	5.5	8.5	5.0	6.5	23.0	19.0	20.5
11	.0	.0	.0	5.5	3.0	4.5	10.5	6.0	9.0	22.0	19.0	20.0
12	.0	.0	.0	4.0	1.5	3.0	11.0	8.5	10.0	19.0	16.5	17.5
13	.0	.0	.0	5.5	2.5	4.0	10.5	9.0	9.5	16.5	16.0	16.0
14	.0	.0	.0	7.0	5.5	6.5	9.0	8.0	8.5	16.0	15.0	15.5
15	.0	.0	.0	5.5	3.0	4.5	9.0	7.5	8.5	18.5	14.5	16.5
16	.0	.0	.0	4.0	1.0	3.0	9.0	8.0	8.5	19.0	16.5	17.5
17	.0	.0	.0	5.5	3.0	4.5	9.0	8.0	8.5	19.0	15.0	16.5
18	.0	.0	.0	8.0	4.5	6.0	12.0	7.0	9.5	16.5	15.0	15.5
19	.0	.0	.0	8.0	4.5	6.0	12.5	8.0	10.5	15.0	15.0	15.0
20	.0	.0	.0	9.0	5.5	7.0	13.0	8.5	11.0	16.5	14.5	15.5
21	.0	.0	.0	10.5	6.5	8.5	14.5	9.0	12.0	16.5	15.5	16.0
22	.0	.0	.0	11.0	7.5	9.5	14.5	11.0	13.0	18.5	15.0	16.5
23	.0	.0	.0	12.0	8.5	10.0	16.5	12.5	14.5	17.0	15.5	16.0
24	.0	.0	.0	11.0	9.0	10.0	16.5	13.0	14.5	17.0	15.0	16.0
25	1.0	.0	.5	10.0	8.5	9.5	16.0	13.5	15.0	17.0	16.0	16.5
26	1.0	.0	---	9.0	6.0	8.0	15.0	14.5	14.5	17.5	16.0	17.0
27	2.5	1.0	1.5	7.5	5.0	6.0	14.5	13.5	14.0	16.0	14.0	14.5
28	4.5	1.0	2.5	8.5	4.5	6.5	14.5	12.5	13.5	16.0	14.0	15.0
29	---	---	---	9.0	6.5	8.0	16.0	12.5	14.5	16.5	14.0	15.5
30	---	---	---	11.0	9.0	10.0	16.0	12.5	14.5	18.0	15.0	16.5
31	---	---	---	13.0	10.5	12.0	---	---	---	19.0	16.5	18.0
MONTH	4.5	.0	.0	13.0	1.0	6.5	16.5	5.0	10.5	23.0	11.5	16.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	19.0	18.0	---	20.0	18.0	19.0	24.0	21.0	22.5	22.0	19.0	20.0
2	---	---	---	19.0	17.5	18.0	24.0	21.5	23.0	21.0	19.5	20.0
3	---	---	---	21.5	17.5	19.0	23.5	21.0	22.5	23.0	19.0	20.5
4	---	---	---	18.5	15.5	17.0	24.0	21.5	22.5	22.0	19.5	20.5
5	---	---	---	17.5	14.0	15.5	24.5	20.5	22.5	22.5	20.0	21.0
6	---	---	---	17.5	13.5	15.5	24.0	20.5	22.5	22.0	19.5	20.5
7	---	---	---	19.0	14.0	16.5	23.0	18.5	20.5	20.5	18.0	18.5
8	---	---	---	20.5	15.0	17.5	24.0	19.5	21.0	18.0	15.0	16.5
9	---	---	---	21.5	16.5	19.0	24.0	19.0	21.0	17.0	14.5	15.5
10	---	---	---	20.0	17.5	19.0	22.5	19.5	20.0	18.0	15.5	16.5
11	---	---	---	20.5	18.0	19.0	19.0	16.0	17.5	17.5	14.5	16.0
12	---	---	---	22.0	18.0	20.0	18.0	15.0	16.0	17.5	14.5	16.0
13	---	---	---	24.0	19.0	21.5	18.0	16.5	17.0	18.0	16.5	17.0
14	---	---	---	22.5	20.5	21.5	17.5	15.0	16.5	18.0	16.5	17.5
15	---	---	---	24.0	20.5	22.0	18.0	14.5	16.0	17.0	14.0	15.5
16	---	---	---	24.5	21.5	22.5	18.0	13.5	16.0	16.5	13.5	15.0
17	---	---	---	24.0	20.0	22.0	17.5	15.0	15.5	17.0	13.5	15.0
18	---	---	---	22.5	20.0	21.5	18.0	15.0	16.0	16.5	15.0	16.0
19	---	---	---	23.5	19.0	21.0	19.5	15.5	17.5	15.5	12.0	13.5
20	---	---	---	23.0	19.5	21.0	19.5	17.0	18.0	14.0	12.5	13.0
21	---	---	---	20.5	19.5	20.0	20.5	16.5	18.0	16.0	13.5	15.0
22	---	---	---	22.5	18.5	20.5	19.5	16.5	18.5	15.5	13.5	14.5
23	---	---	---	24.0	19.5	21.5	20.0	18.0	19.0	14.5	11.5	13.0
24	---	---	---	24.0	21.0	22.5	22.0	18.5	20.0	13.5	12.0	12.5
25	---	---	---	24.5	21.0	22.5	22.0	19.5	20.5	14.5	12.0	13.0
26	---	---	---	24.0	21.5	23.0	22.5	19.5	21.0	14.5	13.0	13.5
27	20.0	16.5	---	24.0	21.0	23.0	23.5	19.5	21.5	14.5	13.0	13.5
28	19.0	16.5	17.5	24.0	20.0	22.0	22.5	20.5	21.5	15.5	14.0	14.5
29	18.5	16.5	17.5	22.0	19.5	20.5	23.0	20.0	21.5	15.5	15.0	15.5
30	19.5	17.5	18.5	22.0	19.5	20.5	23.5	19.5	21.5	15.0	14.5	15.0
31	---	---	---	23.5	19.5	21.5	22.5	19.0	20.5	---	---	---
MONTH	20.0	16.5	18.0	24.5	13.5	20.0	24.5	13.5	19.5	23.0	11.5	16.0

01396535 SOUTH BRANCH RARITAN RIVER AT ARCH STREET AT HIGH BRIDGE, NJ

LOCATION.--Lat 40°39'49", long 74°53'52", Hunterdon County, Hydrologic Unit 02030105, at bridge on Arch Street in High Bridge, 0.9 mi (1.4 km) northeast of Mariannes Corner, 1.0 mi (1.6 km) downstream from Lake Solitude dam, and 4.3 mi (6.9 km) northeast of Norton.

DRAINAGE AREA.--68.8 mi^2 (178.2 km^2).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Healtn, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)
JAN 22...	1350	540	160	8.0	1.0	13.4	--	340	1600	34
MAR 19...	1315	149	192	7.8	7.5	12.3	--	20	2	63
MAY 22...	1000	107	203	7.9	15.0	9.7	--	170	14	72
AUG 01...	1340	80	222	8.2	22.5	8.1	2.0	230	31	89

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
JAN 22...	8.0	3.4	14	1.2	16	--	9.7	24	.1
MAR 19...	14	6.7	9.1	1.2	40	--	14	16	.1
MAY 22...	16	7.9	9.7	1.4	55	.0	13	14	.1
AUG 01...	19	10	9.7	1.4	77	--	13	13	.1

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHATE, TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
JAN 22...	6.2	83	<1.0	.20	1.1	1.3	--	.19	3.4
MAR 19...	13	101	1.5	<.10	--	.30	1.8	.12	1.9
MAY 22...	13	119	1.1	.20	1.2	1.4	2.5	.12	3.4
AUG 01...	13	135	1.3	--	--	1.0	2.3	.25	4.6

DATE	TIME	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	BORON, TOTAL RECOV-ERABLE (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)
MAY 22...	1000	30	1	0	30	1	40	10

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	PHENOLS (UG/L)
MAY 22...	390	7	40	<.5	4	0	20	1

01396580 SPRUCE RUN AT GLEN GARDNER, NJ

LOCATION.--Lat 40°41'29", long 74°56'15", Hunterdon County, Hydrologic Unit 02030105, on right downstream wingwall of bridge on Sanatorium Road in Glen Gardner, 0.8 mi (1.3 km) downstream from Alpaugh Brook, and 2.0 mi (3.2 km) upstream from Spruce Run Reservoir.

DRAINAGE AREA.--12.3 mi² (31.9 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1978 to current year.

GAGE.--Water-stage recorder. Datum of gage is 389.10 ft (118.598 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,820 ft³/s (51.5 m³/s) Jan. 24, 1979, gage height, 7.60 ft (2.316 m) from high-water mark, from rating curve extended above 200 ft³/s (5.66 m³/s) on basis of slope-conveyance computation; minimum, 1.9 ft³/s (0.054 m³/s) July 22, 1978, gage height, 1.33 ft (0.405 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 300 ft³/s (8.50 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage Height (ft)	Gage Height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage Height (ft)	Gage Height (m)
Jan. 8	0130	859	24.3	3.56	1.085	Feb. 26	0415	686	19.4	4.93	1.503
Jan. 21	0845	1190	33.7	3.87	1.180	Sept. 6	0730	821	23.3	5.30	1.615
Jan. 24	2030	*1820	51.5	a7.60	2.316	Sept. 22	0130	366	10.4	3.93	1.198

a - From high-water mark.

Note.--Peak discharges were determined from rating curve extented above 200 ft³/s (5.66 m³/s) on basis of slope-conveyance computation.

Minimum discharge, 2.9 ft³/s (0.082 m³/s) Oct. 3, gage height 1.37 ft (0.418 m).

DISCHANGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.2	6.2	15	64	48	54	20	18	19	9.0	5.6	3.8
2	3.2	6.2	9.6	214	43	52	27	16	18	8.7	5.3	3.6
3	2.9	6.2	8.0	74	38	42	33	17	15	7.8	5.6	6.6
4	6.2	6.2	26	53	32	37	30	22	14	8.0	6.6	5.1
5	6.2	6.2	31	53	26	54	36	16	14	8.2	4.8	4.5
6	4.9	6.2	13	40	23	154	24	15	16	8.0	4.5	172
7	3.8	5.7	9.6	68	25	71	20	14	17	7.4	4.5	31
8	3.5	5.7	13	346	27	52	19	14	14	7.0	4.0	15
9	3.2	6.2	114	70	24	36	43	13	12	6.6	3.6	196
10	3.2	6.2	39	57	21	40	47	12	11	6.4	5.1	9.1
11	3.2	6.2	19	46	20	70	27	11	11	6.6	6.0	8.1
12	3.5	7.0	14	44	19	45	24	14	14	6.6	39	7.0
13	3.8	6.6	13	47	20	32	23	18	16	6.3	26	6.6
14	5.7	6.6	13	59	19	33	57	20	16	7.0	8.6	15
15	6.6	6.6	10	32	20	29	39	16	12	6.6	6.6	22
16	6.6	7.0	9.6	29	19	26	29	12	13	11	5.3	9.1
17	4.9	8.0	12	21	18	25	26	10	11	18	4.5	7.3
18	4.5	21	10	18	16	23	24	13	13	10	5.1	7.0
19	4.9	8.0	11	15	17	22	21	20	12	8.6	7.0	5.3
20	5.7	5.7	8.5	13	18	21	20	18	8.0	6.3	5.3	5.3
21	5.7	4.9	43	570	19	20	18	14	7.8	13	4.5	55
22	5.3	4.5	19	89	22	19	18	14	7.7	8.6	4.5	137
23	5.3	4.9	13	48	27	16	17	54	7.9	6.0	4.3	37
24	5.7	21	13	530	156	60	16	156	7.6	11	6.6	22
25	5.7	9.1	68	219	172	45	16	106	7.2	6.0	7.7	19
26	6.6	6.2	25	108	233	27	20	75	7.3	6.6	6.0	15
27	15	5.3	16	99	71	23	69	44	8.1	7.0	5.1	15
28	8.5	6.6	19	80	58	21	33	36	8.5	5.3	4.5	14
29	7.0	6.6	34	69	---	24	27	24	9.2	10	4.5	15
30	6.2	28	25	60	---	22	21	19	11	14	6.6	18
31	6.6	---	11	54	---	20	---	17	---	7.0	4.5	---
TOTAL	167.3	240.8	684.3	3289	1251	1215	844	868	358.3	258.6	221.8	886.4
MEAN	5.40	8.03	22.1	106	44.7	39.2	28.1	28.0	11.9	8.34	7.15	29.5
MAX	15	28	114	570	233	154	69	156	19	18	39	196
MIN	2.9	4.5	8.0	13	16	16	16	10	7.2	5.3	3.6	3.6
CFSM	.44	.65	1.80	8.62	3.63	3.19	2.29	2.28	.97	.68	.58	2.40
IN.	.51	.73	2.07	9.95	3.78	3.67	2.55	2.62	1.08	.78	.67	2.68

WTR YR 1979 TOTAL 10284.5 MEAN 28.2 MAX 570 MIN 2.9 CFSM 2.29 IN 31.10

01396586 SPRUCE RUN NEAR GLEN GARDNER, NJ

LOCATION.--Lat 40°40'41", long 74°55'06", Hunterdon County, Hydrologic Unit 02030105, at site 800 ft (244 m) downstream of Rocky Run, 0.3 mi (0.5 km) above Van Syckel Road bridge, 1.5 mi (2.4 km) northwest of High Bridge, and 1.6 mi (2.6 km) southeast of Glen Gardner.

DRAINAGE AREA.--

WATER-QUALITY RECORDS

PERIOD OF RECORD.--February to September 1979.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)
FEB 13...	1010	158	7.6	.0	14.9	--	790	31	49
APR 09...	1010	149	7.6	5.0	12.3	--	700	33	45
MAY 31...	0950	142	7.4	14.5	10.2	--	E3500	E1600	45
AUG 15...	1015	160	7.2	15.5	10.0	1.0	1300	240	53

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
FEB 13...	12	4.6	7.9	1.3	20	21	14	.1	17
APR 09...	11	4.2	8.2	1.0	21	20	13	.1	14
MAY 31...	11	4.2	7.7	1.1	25	20	13	.1	15
AUG 15...	13	5.1	8.9	1.2	36	20	12	.1	17

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHATE, TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
FEB 13...	91	1.3	<.10	--	.70	2.0	--	1.0
APR 09...	93	.80	<.10	--	.50	1.3	.04	.8
MAY 31...	92	<1.0	<.10	--	.70	--	.07	2.6
AUG 15...	111	<1.0	.40	.60	1.0	--	.08	2.0

01396660 MULHOCKAWAY CREEK AT VAN SYCKEL, NJ

LOCATION.--Lat 40°38'51", long 74°58'09", Hunterdon County, Hydrologic Unit 02030105, at bridge on Jutland Road, 0.2 mi (0.3 km) south of Van Syckel, 0.8 mi (1.3 km) north of Perryville, and 0.3 mi (0.5 km) upstream from Spruce Run Reservoir.

DRAINAGE AREA.--11.8 mi² (30.6 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1973-77. July 1977 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 280 ft (85.3 m), from topographic map.

REMARKS.--Water-discharge records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,950 ft³/s (112 m³/s) Jan. 24, 1979, (gage height, 6.48 ft or 1.975 m) from rating curve extended above 200 ft³/s (5.66 m³/s); minimum, 2.3 ft³/s (0.065 m³/s) July 29, Sept. 11, 12, 15, 1977, gage height, 0.78 ft (0.238 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 300 ft³/s (8.50 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage Height (ft)	Gage Height (m)
Jan. 3	0300	417	11.8	3.05	0.930
Jan. 8	1430	570	16.1	3.36	1.024
Jan. 20	2345	1190	33.7	4.23	1.289
Jan. 24	1600	*3950	112	6.48	1.975
Feb. 26	0515	1210	34.3	4.44	1.353
May 23	2130	559	15.8	3.44	1.048
June 11	1345	337	9.54	2.93	0.893
July 16	2100	386	10.9	3.06	0.933
July 18	1030	519	14.7	3.36	1.024
Sept. 6	0715	1540	43.6	4.80	1.463
Sept. 22	0130	695	19.7	3.69	1.125

Minimum discharge, 4.1 ft³/s (0.116 m³/s) Sept. 1, gage-height 0.89 ft (0.271 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.0	5.5	13	36	30	48	31	19	21	15	8.7	4.6
2	4.8	5.5	9.2	115	26	46	39	19	21	11	9.1	4.8
3	4.8	5.5	7.8	147	23	38	42	19	42	10	17	7.1
4	6.5	5.5	18	28	23	35	41	23	31	11	17	5.1
5	6.0	5.5	18	24	19	44	44	19	23	11	8.7	6.1
6	6.5	5.5	10	21	18	130	30	17	21	8.7	8.3	126
7	5.0	5.5	8.5	21	19	59	26	17	19	7.9	7.9	19
8	4.8	5.3	17	218	19	43	25	17	19	7.5	6.4	11
9	4.8	5.3	96	98	17	37	46	16	19	7.1	5.4	9.1
10	4.8	5.3	32	36	17	42	46	15	17	6.8	7.9	8.3
11	4.6	5.3	16	29	15	80	28	15	83	6.4	10	7.5
12	4.7	5.3	14	23	15	37	26	17	33	6.8	69	6.8
13	4.8	5.3	13	43	15	34	23	21	26	6.8	40	6.8
14	8.8	5.3	12	36	15	34	61	24	23	8.7	19	23
15	6.5	5.3	10	23	15	30	35	19	20	8.3	15	14
16	5.5	5.5	9.6	19	14	27	28	16	18	58	12	8.3
17	6.0	6.5	11	20	14	27	25	14	18	30	8.7	7.1
18	5.3	18	9.2	15	12	26	23	16	17	78	9.6	6.8
19	5.5	7.4	8.1	18	14	24	22	30	14	22	10	6.8
20	6.0	6.0	8.1	58	14	23	21	26	13	15	7.1	6.1
21	5.5	5.7	47	361	14	22	21	17	12	13	6.8	78
22	5.3	5.5	17	60	19	21	20	14	13	11	6.1	146
23	5.2	6.8	13	42	19	19	20	102	14	9.6	5.8	27
24	5.0	13	11	567	150	61	19	144	12	9.1	8.7	16
25	5.3	7.1	74	102	164	53	19	99	10	8.3	6.8	14
26	6.0	6.0	23	69	263	38	28	44	9.6	7.5	9.1	13
27	13	6.2	16	62	83	34	48	32	9.1	7.1	6.1	12
28	6.8	7.4	12	50	59	31	29	29	14	6.4	5.4	11
29	6.0	9.2	10	44	---	35	24	26	17	26	6.1	13
30	5.5	27	10	37	---	32	21	30	17	19	6.1	16
31	5.5	---	11	34	---	31	---	28	---	11	4.8	---
TOTAL	179.6	218.2	584.5	2456	1125	1241	911	944	625.7	464.0	368.6	640.3
MEAN	5.79	7.27	18.9	79.2	40.2	40.0	30.4	30.5	20.9	15.0	11.9	21.3
MAX	13	27	96	567	263	130	61	144	83	78	69	146
MIN	4.6	5.3	7.8	15	12	19	19	14	9.1	6.4	4.8	4.6
CFSM	.49	.62	1.60	6.71	3.41	3.39	2.58	2.59	1.77	1.27	1.01	1.81
IN.	.57	.69	1.84	7.74	3.55	3.91	2.87	2.98	1.97	1.46	1.16	2.02

CAL YR 1978 TOTAL 7441.4 MEAN 20.4 MAX 314 MIN 3.7 CFSM 1.73 IN 23.46
WTR YR 1979 TOTAL 9757.9 MEAN 26.7 MAX 567 MIN 4.6 CFSM 2.26 IN 30.76

01396660 MULHOCKAWAY CREEK AT VAN SYCKEL, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to current year.

COOPERATION.--Selected field data and samples for laboratory analyses supplied by the New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)
FEB									
13...	1145	15	160	7.4	.0	13.7	--	<20	49
APR									
09...	1145	26	156	7.7	5.5	12.6	--	330	17
MAY									
31...	1320	26	161	8.4	17.0	9.1	1.0	490	130
AUG									
15...	1230	16	173	7.6	16.0	9.7	2.0	80	46

DATE	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
FEB									
13...	58	15	4.9	5.3	1.1	42	19	7.3	.0
APR									
09...	53	14	4.4	6.2	1.1	31	20	8.2	.1
MAY									
31...	58	16	4.4	5.9	1.3	42	20	7.7	.1
AUG									
15...	66	17	5.7	6.8	1.4	56	16	7.9	.1

DATE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHATE, TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
FEB									
13...	15	93	1.2	<.10	--	.80	2.0	--	.6
APR									
09...	12	89	1.0	<.10	--	.50	1.5	.02	2.1
MAY									
31...	14	102	<1.0	<.10	--	.70	--	.06	5.5
AUG									
15...	15	114	1.0	.20	.40	.60	1.6	.06	1.7

01396800 SPRUCE RUN AT CLINTON, NJ

LOCATION.--Lat 40°38'21", long 74°54'58", Hunterdon County, Hydrologic Unit 02030105, 1,800 ft (550 m) downstream from dam at Spruce Run Reservoir, 0.2 mi (0.3 km) north of Clinton, 0.3 mi (0.5 km) upstream from mouth, and 2.2 mi (3.5 km) southwest of High Bridge.

DRAINAGE AREA.--41.3 mi² (107.0 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1959 to current year.

GAGE.--Water-stage recorder. Concrete control since Mar. 15, 1964. Datum of gage is 193.30 ft (58.918 m) National Geodetic Vertical Datum of 1929. May to Nov. 24, 1959, nonrecording gage; Nov. 25, 1959 to July 23, 1961, water-stage recorder at site 1,800 ft (550 m) upstream and at datum 1.22 ft (0.372 m) lower; July 24, 1961 to Mar. 14, 1964, water-stage recorder at site 1,500 ft (460 m) upstream at datum 1.22 ft (0.372 m) lower.

REMARKS.--Water-discharge records fair. Flow regulated by Spruce Run Reservoir (see Raritan River Basin, reservoirs in).

AVERAGE DISCHARGE.--20 years, 61.4 ft³/s (1.739 m³/s) unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum, 6,410 ft³/s (182 m³/s) Apr. 2, 1970, gage height, 5.17 ft (1.576 m); no flow Aug. 22 to Sept. 17, 1963, Sept. 19, 1963 to Mar. 14, 1964, Mar. 19, 1964, result of filling Spruce Run Reservoir.

EXTREMES FOR CURRENT YEAR.--Maximum, 2,600 ft³/s (73.6 m³/s) Jan. 24, minimum, 4.8 ft³/s (0.136 m³/s) Nov. 28, gage height, 1.24 ft (0.378 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	68	70	14	15	103	179	178	77	82	42	17	13
2	55	66	14	22	114	162	138	68	70	46	31	10
3	53	53	14	101	92	146	55	72	103	37	24	16
4	41	53	15	42	82	122	55	73	122	18	16	54
5	22	53	15	77	90	130	30	80	92	46	19	85
6	12	51	13	90	78	328	19	78	64	22	16	465
7	11	46	12	112	72	334	12	58	58	13	13	210
8	22	53	13	716	123	186	8.1	11	53	12	23	85
9	39	59	19	322	146	146	8.4	10	50	12	10	43
10	49	53	17	173	142	138	24	10	49	12	41	74
11	66	57	17	126	142	246	9.3	10	146	12	32	155
12	75	61	16	103	142	152	39	10	198	16	57	155
13	61	57	16	112	117	129	58	11	93	22	118	155
14	46	55	15	164	75	134	89	11	64	46	60	61
15	39	53	15	126	58	131	143	19	55	44	52	8.5
16	18	53	15	90	48	67	108	38	49	39	26	8.1
17	39	48	14	80	48	73	131	24	48	109	12	8.1
18	61	12	14	77	48	85	156	22	61	87	9.1	8.1
19	70	12	13	57	48	70	144	47	36	68	11	8.8
20	80	12	13	66	48	79	127	63	32	37	11	6.4
21	85	12	16	1180	48	61	68	51	26	32	11	8.3
22	85	12	14	591	48	106	68	41	29	30	13	287
23	75	12	14	216	48	167	68	55	48	22	11	158
24	75	12	15	720	48	98	68	341	42	23	17	84
25	85	12	18	1300	520	114	68	354	24	21	29	85
26	85	12	16	387	1010	211	69	207	16	40	26	82
27	46	13	15	260	375	193	70	152	18	55	23	93
28	25	12	15	218	214	178	68	121	23	31	17	95
29	39	14	14	176	---	178	72	111	53	27	16	5.9
30	44	15	14	144	---	178	68	117	48	15	21	6.4
31	57	---	14	121	---	178	---	110	---	17	18	---
TOTAL	1628	1103	459	7984	4127	4699	2218.8	2452	1852	1053	800.1	2533.6
MEAN	52.5	36.8	14.8	258	147	152	74.0	79.1	61.7	34.0	25.8	84.5
MAX	85	70	19	1300	1010	334	178	354	198	109	118	465
MIN	11	12	12	15	48	61	8.1	10	16	12	9.1	5.9

CAL YR 1978 TOTAL 26029.5 MEAN 71.3 MAX 991 MIN 8.1
WTR YR 1979 TOTAL 30909.5 MEAN 84.7 MAX 1300 MIN 5.9

01396800 SPRUCE RUN AT CLINTON, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1960-62, 1967 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1968 to September 1969, January 1971 to current year.
SUSPENDED-SEDIMENT DISCHARGE: October 1960 to April 1961.

REMARKS.--Once daily water temperatures supplied by New Jersey Bureau of Water Facility Operations. Water temperatures taken at outflow of dam.

COOPERATION.--Once daily water temperatures supplied by New Jersey Water Supply facilities Element. Selected field data and samples for laboratory analyses supplied by the New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and selected water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum daily, 24.5°C July 31, 1973; minimum daily, 0.0°C on many days during winter months.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum daily, 18.5°C Oct. 1; minimum daily, 0.0°C on several days during winter months.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)
FEB 13...	1320	142	160	7.8	.0	10.2	--	20	79
APR 09...	1330	8.7	144	7.8	6.0	12.0	--	<20	<2
MAY 31...	1140	115	141	8.1	20.0	8.7	1.0	<20	2
AUG 15...	1340	61	140	7.9	18.5	9.2	1.0	490	540

DATE	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
FEB 13...	45	11	4.2	6.9	1.4	25	16	12	.1
APR 09...	50	12	4.8	6.9	1.3	34	17	11	.1
MAY 31...	45	11	4.2	6.8	1.4	28	16	9.4	.1
AUG 15...	49	12	4.7	6.9	1.2	36	16	10	.1

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHATE, TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
FEB 13...	6.3	72	.30	<.10	--	.80	1.1	.03	2.5
APR 09...	6.5	89	<1.0	<.10	--	.70	--	.06	2.7
MAY 31...	3.2	81	<1.0	<.10	--	.90	--	--	5.7
AUG 15...	5.8	92	<1.0	.70	2.9	3.6	--	.09	5.9

01396800 SPRUCE RUN AT CLINTON, NJ--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18.5	13.5	7.0		2.0	2.0	7.0	10.0	10.5	12.0	12.5	15.0
2	18.0	13.0	7.0		1.5	2.5	6.0	10.0	11.0	11.0	13.0	15.0
3	17.0	13.0	7.5		.0	2.5	7.5	10.5	11.5	11.0	15.0	15.5
4	18.0	13.0	8.0		.5	3.0	7.0	11.5	10.5	10.5	13.5	15.5
5	18.0	13.0	7.5		.5	3.5	7.5	12.0	10.5	10.5	13.5	15.5
6	18.0	13.0	7.5		.0	4.0	7.5	11.0	10.5	10.5	14.0	16.0
7	18.0	13.0	7.5		.0	3.0	6.5	11.5	10.5	11.0	14.0	16.5
8	17.0	13.0	8.0		1.5	3.0	7.0	11.0	10.5	11.0	14.5	15.0
9	17.0	13.0	8.0		1.5	2.5	7.0	12.0	11.0	11.0	14.5	14.0
10	16.0	12.5	6.0		1.0	2.5	7.0	13.5	10.5	11.0	14.5	15.0
11	16.0	13.0	6.0		.0	3.0	7.0	13.0	13.5	11.0	14.0	16.0
12	16.0	12.5	6.0		1.0	2.0	7.5	10.5	10.5	11.0	11.5	16.0
13	16.0	12.5	6.0		1.5	2.5	7.0	10.0	10.5	10.5	11.5	15.5
14	17.0	12.5	5.0		1.5	4.0	7.5	10.5	10.5	12.5	11.5	16.5
15	16.0	13.0	5.5		1.5	3.0	8.0	10.0	10.5	14.0	12.0	16.0
16	15.5	12.0	5.0		1.5	2.0	8.0	10.0	10.5	13.0	14.0	15.5
17	15.0	12.0	5.0		1.0	3.0	8.0	9.5	10.5	12.5	14.0	15.5
18	15.0	13.0	4.5		1.5	3.0	8.0	9.5	11.0	13.0	14.0	15.5
19	15.0	12.0	4.0		1.5	3.0	8.0	10.0	10.5	12.0	14.0	16.0
20	---	11.5	3.5		1.5	3.5	8.5	10.5	11.0	12.0	13.5	15.0
21	---	10.5	4.5		1.5	4.0	9.0	10.0	11.0	11.5	13.5	16.0
22	---	10.5	5.0		2.5	4.5	9.5	10.0	10.5	11.5	14.0	17.5
23	14.5	10.5	4.5		2.5	5.0	10.0	10.0	11.0	11.5	14.5	17.0
24	14.5	10.5	4.5		2.0	5.0	10.0	10.5	10.5	11.5	15.0	17.0
25	14.0	10.0	4.0		3.0	5.5	10.0	10.5	10.0	12.0	16.0	16.5
26	14.5	9.0	4.0		2.0	5.5	10.0	10.0	10.5	12.5	16.0	16.5
27	14.0	8.5	3.5		2.0	5.5	10.5	10.0	11.0	12.5	15.5	15.5
28	14.0	8.5	3.5		1.0	5.5	10.0	10.0	11.0	12.5	16.0	17.0
29	13.5	7.5	3.0		---	6.0	11.0	10.0	11.0	12.5	15.0	17.5
30	13.0	8.0	2.0		---	6.0	10.0	10.0	11.5	11.5	15.0	17.5
31	13.0	---	2.5		---	6.5	---	10.5	---	12.0	14.5	---
MEAN	16.0	11.5	5.5		1.5	4.0	8.5	10.5	11.0	11.5	14.0	16.0

01397000 SOUTH BRANCH RARITAN RIVER AT STANTON, NJ

LOCATION.--Lat 40°34'21", long 74°52'10", Hunterdon County, Hydrologic Unit 02030105, on right bank at downstream side of highway bridge at Stanton, and 0.4 mi (0.6 km) upstream from Prescott Brook.

DRAINAGE AREA.--147 mi² (381 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1903 to December 1906, July 1919 to current year. Monthly discharge only for some periods published in WSP 1302.

REVISED RECORDS.--WSP 561: Drainage area. WSP 1552: 1904, 1922-24(M), 1928-29(M), 1933-35(M).

GAGE.--Water-stage recorder. Datum of gage is 125.01 ft (38.103 m) National Geodetic Vertical Datum of 1929. Prior to Aug. 17, 1925, nonrecording gage on downstream side of highway bridge at same site and datum.

REMARKS.--Water-discharge records good. Flow regulated by Spruce Run Reservoir since September 1963 (see Raritan River Basin, reservoirs in). Occasional regulation at low flows by ponds above station. Slight diurnal fluctuation caused by small powerplants above station. Water diverted by Hamden Pumping Station, 4.0 mi (6.4 km) upstream, into Round Valley Reservoir since February 1966 (see Raritan River Basin, diversions).

AVERAGE DISCHARGE.--63 years (1904-06, 1920-79) 243 ft³/s (6.882 m³/s), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18,000 ft³/s (510 m³/s) Aug. 19, 1955 (gage height, 15.22 ft or 4.639 m) from rating curve extended above 6,400 ft³/s (180 m³/s) on basis of computation of flow over Clinton Dam, 6.5 mi (10.5 km) upstream, at gage height 10.72 ft (3.269 m) contracted-opening measurement 1.7 mi (2.7 km) downstream, and slope-area measurement 0.4 mi (0.6 km) downstream, at gage height 15.22 ft (4.639 m), adjusted to present site; minimum, 9 ft³/s (0.25 m³/s) Nov. 7, 1931; minimum daily, 12 ft³/s (0.34 m³/s) Oct. 18, 1963.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 12,100 ft³/s (343 m³/s) Jan. 25, gage height, 12.72 ft (3.877 m); minimum, 69 ft³/s (1.95 m³/s) Oct. 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	123	130	143	320	440	715	380	282	341	198	118	90
2	112	133	112	1050	393	659	345	257	297	189	121	81
3	108	112	101	1070	374	590	330	268	459	180	151	102
4	108	112	135	428	353	484	329	301	449	146	388	127
5	108	112	202	370	329	520	333	271	341	180	151	151
6	85	111	145	353	310	1260	247	250	290	151	118	2280
7	76	104	115	389	300	1410	217	227	261	132	112	1050
8	72	107	121	2680	290	755	201	162	240	125	106	370
9	96	117	640	1160	280	590	271	157	227	134	86	243
10	100	109	511	642	260	539	454	154	220	154	104	223
11	116	112	235	501	250	1010	290	144	580	146	127	309
12	130	117	186	473	245	627	282	146	1100	149	353	290
13	137	114	166	436	235	510	286	171	444	148	560	279
14	137	108	153	663	230	505	469	186	313	180	247	223
15	139	106	139	476	230	484	565	186	271	189	192	275
16	98	108	130	338	215	341	416	177	247	565	146	154
17	85	113	135	301	200	337	402	151	233	585	116	134
18	114	131	126	293	195	345	416	141	247	464	108	121
19	121	117	116	259	190	301	379	227	207	294	121	121
20	137	84	109	371	200	305	357	271	177	227	110	112
21	141	80	285	3780	350	275	271	207	168	230	100	174
22	149	76	202	2390	490	297	261	180	162	210	96	1760
23	132	77	145	790	420	374	247	329	201	186	92	654
24	123	147	137	2410	1100	449	237	1620	180	198	104	374
25	137	121	444	6880	2860	693	230	1500	162	159	146	317
26	139	91	265	1540	4240	520	250	955	154	121	121	297
27	152	85	196	1050	1420	474	693	616	149	168	110	286
28	100	87	175	868	819	430	420	489	149	121	94	301
29	105	91	176	707	---	440	353	425	220	157	90	171
30	102	163	172	589	---	440	301	449	217	177	195	220
31	115	---	142	505	---	416	---	406	---	127	118	---
TOTAL	3597	3275	6059	34082	17218	17095	10232	11305	8706	6390	4801	11289
MEAN	116	109	195	1099	615	551	341	365	290	206	155	376
MAX	152	163	640	6880	4240	1410	693	1620	1100	585	560	2280
MIN	72	76	101	259	190	275	201	141	149	121	86	81

CAL YR 1978 TOTAL 104394 MEAN 286 MAX 3720 MIN 72
WTR YR 1979 TOTAL 134049 MEAN 367 MAX 6880 MIN 72

01397000 SOUTH BRANCH RARITAN RIVER AT STANTON, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1960 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: November 1968 to September 1979 (discontinued).
WATER TEMPERATURES: December 1959 to September 1962, November 1968 to September 1979 (discontinued).
SUSPENDED-SEDIMENT DISCHARGE: December 1959 to February 1965.

INSTRUMENTATION.--Temperature recorder from December 1959 to September 1962, water-quality recorder from November 1968 to September 1979.

REMARKS.--Missing continuous water-quality records are the result of malfunction of instrument.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 407 micromhos Feb. 5, 1971; minimum, 67 micromhos Aug. 28, 1971.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	---	---	---	191	182	186	268	263	265	197	182	192
2	---	---	---	185	179	182	268	262	264	184	142	161
3	199	197	---	186	180	183	267	264	265	153	126	140
4	200	198	199	191	185	189	268	259	262	158	146	152
5	211	201	207	192	185	189	265	253	257	164	160	163
6	214	209	212	192	184	189	255	251	253	173	167	169
7	214	211	212	194	186	191	258	255	256	181	171	174
8	213	209	212	194	188	192	263	255	260	209	138	171
9	214	199	205	191	182	187	259	168	212	201	129	173
10	202	197	199	191	184	188	172	164	168	207	159	174
11	197	190	193	191	184	188	174	169	172	216	166	198
12	192	185	189	190	183	187	185	177	182	224	175	206
13	189	183	186	189	184	187	193	187	190	257	175	191
14	187	182	184	194	187	191	196	195	196	202	181	186
15	199	186	190	197	190	194	200	198	199	248	187	208
16	196	171	182	198	192	196	204	202	203	219	192	200
17	206	198	203	201	194	198	209	205	207	196	192	194
18	205	190	196	225	197	212	212	209	211	205	192	198
19	192	187	190	227	220	224	217	211	214	212	200	205
20	189	184	187	228	219	224	220	216	219	211	208	209
21	185	181	183	227	221	224	278	212	232	236	144	171
22	183	177	181	232	224	228	238	228	232	175	157	167
23	185	179	182	235	226	232	234	229	231	186	172	181
24	185	181	183	236	231	234	233	210	227	183	139	164
25	185	179	181	236	224	230	210	147	163	169	133	149
26	183	179	182	227	221	223	178	165	174	174	145	160
27	190	178	184	230	227	229	183	181	182	173	163	169
28	205	191	198	263	234	245	189	186	187	176	167	172
29	204	195	199	271	254	263	193	184	190	176	165	172
30	197	191	194	264	251	259	196	185	192	171	164	166
31	195	188	191	---	---	---	198	195	197	169	166	167
MONTH	214	171	193	271	179	208	278	147	215	257	126	177

01397000 SOUTH BRANCH RARITAN RIVER AT STANTON, NJ--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	171	168	170							---	---	---
2	175	171	173							---	---	---
3	178	175	177							---	---	---
4	180	179	180							174	168	---
5	181	177	180							175	166	171
6	186	177	182							178	162	172
7	188	186	187							184	169	178
8	189	179	180							201	185	192
9	184	174	180							210	197	203
10	187	172	180							220	206	212
11	189	175	183							222	213	218
12	191	177	185							221	195	211
13	196	181	189							203	195	200
14	201	186	194							202	191	197
15	206	194	201							200	190	196
16	209	194	150							199	190	193
17	222	195	210							204	193	198
18	224	220	222							206	195	201
19	223	220	222							194	184	189
20	221	218	220							185	178	181
21	230	218	223							178	172	176
22	242	222	231							187	173	179
23	263	237	---							189	153	179
24	---	---	---							165	138	149
25	---	---	---							141	135	139
26	---	---	---							161	135	150
27	---	---	---							171	156	163
28	---	---	---							174	167	170
29	---	---	---							173	168	170
30	---	---	---							171	166	168
31	---	---	---							175	166	171
MONTH	263	168	192							222	135	182

01397000 SOUTH BRANCH RARITAN RIVER AT STANTON, NJ--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	175	160	168	197	191	194	216	205	211	191	183	187
2	152	130	139	195	183	190	219	209	214	199	193	196
3	---	---	---	203	189	194	217	176	200	212	202	207
4	---	---	---	210	196	202	211	138	154	211	196	205
5	---	---	---	216	198	210	166	147	154	208	185	197
6	---	---	---	213	199	205	179	167	171	185	79	129
7	---	---	---	222	209	214	184	173	178	111	90	103
8	---	---	---	223	216	220	190	181	187	130	114	122
9	---	---	---	230	212	221	193	184	188	137	123	132
10	---	---	---	220	212	215	202	188	193	143	132	137
11	---	---	---	227	217	222	201	183	193	143	129	137
12	---	---	---	239	223	229	186	146	177	144	128	135
13	---	---	---	244	228	235	146	137	141	148	126	141
14	---	---	---	247	231	237	146	139	143	152	124	138
15	---	---	---	238	225	233	153	146	150	158	137	149
16	---	---	---	240	99	211	161	154	158	163	156	159
17	---	---	---	150	108	139	167	159	164	160	152	157
18	---	---	---	150	115	138	173	170	172	157	149	154
19	---	---	---	159	146	154	184	174	178	157	144	152
20	---	---	---	165	156	162	189	175	181	145	137	141
21	---	---	---	172	163	168	189	186	187	162	139	143
22	---	---	---	173	167	171	194	184	188	137	110	121
23	---	---	---	175	166	171	195	182	189	129	119	123
24	---	---	---	181	174	177	199	183	192	143	130	134
25	---	---	---	198	174	183	198	189	193	148	144	146
26	---	---	---	208	198	203	192	183	188	150	145	148
27	---	---	---	202	194	197	193	187	189	153	146	148
28	199	195	---	202	195	199	200	189	194	153	147	150
29	203	185	194	206	182	198	210	196	203	167	153	162
30	194	190	192	204	185	195	209	202	205	169	164	167
31	---	---	---	212	200	206	202	184	193	---	---	---
MONTH	203	130	173	247	99	197	219	137	182	212	79	151

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	---	---	---	12.0	9.0	10.5	4.0	2.5	3.5	4.5	2.0	3.0
2	---	---	---	11.5	8.5	10.0	4.0	2.0	3.5	7.0	5.0	6.0
3	17.0	16.0	---	11.5	8.0	10.0	3.5	3.0	3.5	5.0	.0	2.0
4	16.0	14.5	15.5	10.5	8.5	9.5	8.0	4.0	6.0	.5	.0	.0
5	16.0	14.5	15.0	11.5	8.5	10.0	7.5	5.5	6.5	.5	.0	.0
6	17.5	15.0	16.0	11.5	8.5	10.0	6.5	4.0	5.0	1.5	.0	.0
7	15.5	13.0	14.5	12.0	9.5	10.5	6.0	4.0	5.0	1.5	.0	.5
8	13.0	11.0	12.0	11.0	9.5	10.0	8.0	6.0	7.0	1.0	.5	.5
9	12.5	9.5	11.0	10.5	7.5	9.0	8.5	6.0	8.0	.5	.0	.0
10	14.0	9.5	12.0	10.5	7.0	9.0	6.0	2.5	4.5	.5	.0	.0
11	15.5	11.5	13.5	11.5	9.5	10.5	3.0	1.0	2.0	0	.0	.0
12	16.5	14.0	15.5	10.0	9.0	9.5	3.0	1.0	2.0	.0	.0	.0
13	17.0	14.5	15.5	9.5	8.5	9.0	3.5	1.0	2.5	1.0	.0	.0
14	17.0	14.5	16.0	11.5	9.0	10.5	3.0	1.0	2.5	2.0	.5	1.5
15	14.0	11.5	13.0	11.5	11.0	11.5	3.5	1.0	2.0	.0	.0	.0
16	13.0	10.0	11.5	11.0	9.0	10.0	3.5	1.0	2.5	1.5	.0	.0
17	12.5	10.5	11.5	10.0	8.5	9.0	3.5	2.5	3.0	.0	.0	.0
18	11.5	8.5	10.5	12.5	10.0	11.5	2.0	.5	1.5	.0	.0	.0
19	13.0	11.0	12.0	10.0	7.5	9.0	.5	.0	.0	.0	.0	.0
20	13.0	11.0	12.0	8.0	5.5	7.0	.5	.0	.0	.0	.0	.0
21	13.0	9.5	11.5	7.0	5.5	6.0	2.5	.5	1.5	.0	.0	.0
22	14.0	10.5	12.5	6.5	5.0	5.5	2.5	1.0	2.0	1.5	.0	.5
23	15.0	11.5	13.5	5.5	5.0	5.0	2.0	.0	1.0	2.5	.0	1.0
24	13.0	9.5	11.0	7.5	5.5	6.5	2.0	.0	1.0	2.5	1.5	2.0
25	11.5	9.0	10.5	6.5	4.0	5.5	3.0	1.5	2.0	1.5	1.0	1.0
26	12.5	11.5	12.0	4.0	2.5	3.0	2.0	.0	1.0	2.5	1.5	2.0
27	13.0	11.0	12.0	2.5	.0	1.0	2.0	.0	1.0	3.5	2.5	3.0
28	11.5	8.5	10.5	3.0	1.5	2.0	.0	.0	.0	3.0	2.5	2.5
29	11.5	8.5	10.0	3.0	.5	2.0	.0	.0	.0	3.0	2.5	2.5
30	10.5	7.5	9.5	4.5	3.0	3.5	.5	.0	.0	3.0	2.0	2.5
31	12.0	9.0	10.5	---	---	---	2.0	.5	1.5	2.5	1.5	2.0
MONTH	17.5	7.5	12.5	12.5	.0	8.0	8.5	.0	2.5	7.0	.0	1.0

RARITAN RIVER BASIN

01397000 SOUTH BRANCH RARITAN RIVER AT STANTON, NJ--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	1.5	.0	.0	4.0	3.0	3.5				---	---	---
2	.0	.0	.0	5.0	4.0	4.5				---	---	---
3	.0	.0	.0	4.5	4.5	4.5				---	---	---
4	1.5	.0	.0	4.5	4.0	4.5				16.5	14.5	---
5	.0	.0	.0	6.0	4.5	5.0				16.5	12.0	14.5
6	.0	.0	.0	6.0	5.5	6.0				17.0	12.5	14.5
7	.0	.0	.0	5.5	4.5	5.0				18.0	13.0	15.5
8	.0	.0	.0	5.5	4.0	5.0				22.0	15.0	18.5
9	.0	.0	.0	6.0	4.5	5.5				24.0	18.0	21.0
10	.0	.0	.0	6.0	5.5	5.5				24.5	20.0	22.5
11	.0	.0	.0	6.0	4.5	5.5				24.5	20.5	22.5
12	.0	.0	.0	4.5	3.0	4.0				21.0	18.0	19.5
13	.0	.0	.0	5.5	3.0	4.0				18.0	17.0	17.5
14	.0	.0	.0	7.0	5.0	6.0				17.0	16.0	16.5
15	.0	.0	.0	5.5	4.0	5.0				20.0	15.0	17.5
16	.0	.0	.0	4.5	3.0	4.0				21.0	16.5	18.5
17	.0	.0	.0	5.5	3.5	4.5				21.0	16.0	18.0
18	.0	.0	.0	7.0	5.0	6.0				17.5	16.0	16.5
19	.0	.0	.0	7.5	5.0	6.0				16.0	15.5	15.5
20	.0	.0	.0	8.0	5.5	7.0				17.5	15.0	16.0
21	.0	.0	.0	9.5	6.0	8.0				16.5	16.0	16.5
22	.0	.0	.0	10.5	7.5	9.0				19.5	15.5	17.0
23	.0	.0	.0	10.0	8.0	9.0				18.0	15.5	16.5
24	.0	.0	.0	10.0	8.0	9.0				17.0	15.5	16.0
25	1.0	.0	.5	10.0	8.5	9.5				17.5	16.0	16.5
26	1.0	.5	1.0	8.5	7.0	8.0				18.0	15.5	16.5
27	2.5	1.0	2.0	7.5	5.5	6.5				15.5	14.5	15.0
28	4.0	2.0	3.0	8.0	5.5	6.5				16.5	13.5	15.0
29	---	---	---	8.5	6.5	7.5				17.0	14.0	15.5
30	---	---	---	10.0	8.0	9.0				18.5	15.0	16.5
31	---	---	---	11.0	8.5	9.5				20.5	16.5	18.5
MONTH	4.0	.0	.0	11.0	3.0	6.0				24.5	12.0	17.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	22.0	17.5	19.5	22.0	19.0	20.5	25.5	21.5	23.0	24.5	21.5	23.0
2	19.0	18.0	18.5	22.0	18.0	20.0	25.5	22.5	24.0	24.0	21.5	22.5
3	---	---	---	23.0	18.5	21.0	24.0	21.5	22.5	24.0	22.0	23.0
4	---	---	---	21.5	17.5	19.0	24.5	21.5	23.0	25.0	21.5	23.0
5	---	---	---	18.5	16.5	17.5	26.0	21.5	23.5	23.0	21.5	22.0
6	---	---	---	20.0	16.0	18.0	25.5	22.0	23.5	22.5	21.5	22.0
7	---	---	---	22.0	16.5	19.0	24.5	20.5	22.5	22.0	21.0	21.5
8	---	---	---	22.5	17.0	20.0	25.0	21.5	23.0	21.5	19.5	20.5
9	---	---	---	23.0	18.0	21.0	26.0	21.0	23.5	19.5	17.5	18.5
10	---	---	---	22.0	19.0	20.5	25.5	22.0	24.0	19.0	16.5	18.0
11	---	---	---	23.5	19.5	21.5	23.0	19.0	21.0	18.5	17.0	18.0
12	---	---	---	24.5	21.0	22.5	19.0	15.5	17.5	18.0	15.5	17.0
13	---	---	---	25.5	20.5	23.0	19.5	15.5	17.5	18.5	16.0	17.0
14	---	---	---	23.5	21.5	22.5	19.0	17.0	18.0	19.5	17.5	18.0
15	---	---	---	23.5	21.0	22.5	18.0	16.0	17.0	19.0	17.5	18.0
16	---	---	---	25.5	21.5	23.0	20.0	15.5	17.5	18.0	15.5	17.0
17	---	---	---	25.0	20.5	22.5	19.5	15.0	17.5	18.5	15.5	17.0
18	---	---	---	23.0	20.5	22.0	18.0	16.0	16.5	18.5	15.5	17.0
19	---	---	---	24.5	21.0	23.0	20.5	16.5	18.5	18.0	16.5	17.5
20	---	---	---	24.5	22.0	23.0	22.0	17.5	20.0	16.0	13.5	15.0
21	---	---	---	22.5	21.5	22.0	21.5	18.5	20.0	15.0	14.0	14.5
22	---	---	---	24.0	20.5	22.5	23.0	18.0	20.5	16.0	15.0	16.0
23	---	---	---	25.0	22.0	23.0	22.5	19.5	21.0	16.5	15.0	16.0
24	---	---	---	25.0	22.0	23.5	23.0	20.0	21.5	15.5	14.0	15.0
25	---	---	---	26.0	22.0	23.5	24.0	21.0	22.5	15.0	13.5	14.5
26	---	---	---	25.5	23.0	24.5	24.0	22.0	23.0	15.5	13.5	14.5
27	---	---	---	24.0	22.0	23.0	25.0	22.0	23.5	15.0	14.0	14.5
28	22.0	20.0	---	25.0	21.5	23.0	25.0	22.5	24.0	15.5	14.0	15.0
29	20.5	18.0	19.5	24.0	20.0	22.5	25.0	23.0	24.0	17.0	15.5	16.0
30	22.0	18.5	20.5	24.0	20.0	22.0	25.0	22.0	23.5	17.0	16.0	16.0
31	---	---	---	24.0	21.0	22.5	25.0	21.5	23.0	---	---	---
MONTH	22.0	17.5	19.5	26.0	16.0	21.5	26.0	15.0	21.5	25.0	13.5	18.0

01397100 PRESCOTT BROOK AT ROUND VALLEY, NJ

LOCATION.--Lat 40°36'28", long 74°50'54", Hunterdon County, Hydrologic Unit 02030105, at bridge on unnamed road at Round Valley, 3.3 mi (5.3 km) west of Whitehouse Station, and 4.1 mi (6.6 km) upstream from mouth.

DRAINAGE AREA.--4.61 mi² (11.94 km²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1959-62, 1977 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)
JAN 25...	1320	154	7.3	8.0	11.0	1.0	220	33
MAR 22...	1400	184	7.8	12.0	12.8	2.0	80	49
MAY 21...	1330	177	7.3	9.5	10.4	--	<20	4
JUL 24...	1320	184	7.3	16.0	10.1	1.0	20	79
SEP 25...	1500	223	7.1	13.0	10.9	--	70	130

DATE	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
JAN 25...	62	16	5.4	6.8	1.0	45	21	4.8	.0
MAR 22...	66	17	5.7	5.8	.8	45	20	7.0	.1
MAY 21...	73	19	6.1	6.4	.8	49	19	7.0	.0
JUL 24...	69	18	5.9	5.6	.9	63	17	6.9	.1
SEP 25...	72	19	6.0	6.7	.9	50	20	7.4	.1

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHATE, TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
JAN 25...	9.2	93	<1.0	<.10	--	.27	.35	1.9
MAR 22...	6.7	89	<1.0	<.10	--	1.1	.02	--
MAY 21...	7.2	110	<1.0	<.10	--	.30	.01	1.2
JUL 24...	7.0	109	<1.0	<.10	--	.90	.02	2.6
SEP 25...	7.7	98	<1.0	.30	1.5	1.8	<.01	.8

01397380 BUSHKILL BROOK AT ROCKEFELLOWS MILLS, NJ

LOCATION.--Lat 40°31'15", long 74°49'40", Hunterdon County, Hydrologic Unit 02030501, at bridge on unnamed road in Rockefellows Mills, 200 ft (61 m) upstream from mouth, and 1.5 mi (2.4 km) west of Three Bridges.

DRAINAGE AREA.--4.31 mi^2 (11.16 km^2).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1977 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)
MAR 01...	1330	390	7.4	6.0	10.6	2.0	<20	<2	120
APR 24...	1425	624	8.0	17.5	9.4	6.0	<20	240	240
MAY 31...	1310	440	6.9	17.0	6.4	2.0	80	11	160

DATE	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
MAR 01...	35	7.5	28	2.7	49	--	59	50	.1
APR 24...	75	13	24	2.8	98	--	150	34	.2
MAY 31...	46	9.8	25	2.7	76	.0	75	37	.1

DATE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHATE, TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
MAR 01...	10	248	1.8	.80	.90	1.7	3.5	1.0	6.3
APR 24...	12	394	1.4	1.2	.70	1.9	3.3	1.9	6.3
MAY 31...	13	281	1.8	.70	.50	1.2	3.0	1.1	11

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
MAY 31...	1310	50	4	0	80	0	20	26

DATE	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	PHENOLS (UG/L)
MAY 31...	450	5	150	<.5	18	0	40	0

01397400 SOUTH BRANCH RARITAN RIVER AT THREE BRIDGES, NJ

LOCATION.--Lat 40°31'01", long 74°48'12", Hunterdon County, Hydrologic Unit 02030105, at bridge on Main Street in Three Bridges, 0.4 mi (0.7 km) northeast of Voorhees Corner, 1.3 mi (2.1 km) downstream of Bushkill Brook, and 2.2 mi (3.6 km) southeast of Darts Mills.

DRAINAGE AREA.--181 mi² (469 km²)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)
FEB 05...	1015	285	232	7.6	.0	14.4	--	50	221	68
MAR 28...	1000	390	186	7.8	5.0	12.5	3.0	20	8	58
MAY 22...	1150	204	217	8.2	17.0	9.6	--	80	79	74
AUG 08...	1145	73	225	8.1	25.0	9.7	1.0	790	170	83
SEP 25...	1050	305	195	7.9	15.0	9.5	1.0	16000	240	69

DATE	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
FEB 05...	16	6.8	9.8	1.5	40	--	23	14	.1
MAR 28...	14	5.5	8.4	1.4	44	--	18	13	.1
MAY 22...	18	7.0	11	1.6	52	.0	21	14	.1
AUG 08...	21	7.5	9.6	2.0	58	--	24	14	.1
SEP 25...	17	6.5	8.5	1.7	41	--	21	15	.1

DATE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHATE, TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
FEB 05...	12	117	1.5	.20	1.5	1.7	3.2	.41	2.3
MAR 28...	9.4	104	1.0	<.10	--	1.1	2.1	.15	2.4
MAY 22...	11	125	1.1	.30	.20	.50	1.6	.33	3.9
AUG 08...	10	144	1.3	<.10	--	.30	1.6	.19	3.3
SEP 25...	11	112	1.2	.40	.20	.60	1.8	.19	1.6

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
MAY 22...	1150	20	1	0	10	0	30	10

DATE	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	PHENOLS (UG/L)
MAY 22...	430	12	60	<.5	1	0	10	0

01398000 NESHANIC RIVER AT REAVILLE, NJ

LOCATION.--Lat 40°28'18", long 74°49'42", Hunterdon County, Hydrologic Unit 02030105, on left bank 50 ft (15 m) downstream from highway bridge, 0.6 mi (1.0 km) southwest of Reaville, 1.5 mi (2.4 km) downstream from Third Neshanic River, and 2.2 mi (3.5 km) upstream from Back Brook.

DRAINAGE AREA.--25.7 mi² (66.6 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1930 to current year.

REVISED RECORD.--WSP 1552: 1933, 1934(M), 1936(M), 1938, 1940(M), 1942(M), 1945-46, 1951, 1952(M).

GAGE.--Water-stage recorder. Concrete control since Sept. 26, 1935. Datum of gage is 109.46 ft (33.363 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records good except those for periods of no gage-height record, which are fair.

AVERAGE DISCHARGE.--49 years, 36.3 ft³/s (1.028 m³/s), 19.15 in/yr (486 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,900 ft³/s (450 m³/s) Aug. 28, 1971 (gage height, 13.84 ft or 4.218 m, from high-water mark in gage house) from rating curve extended above 1,700 ft³/s (48 m³/s) on basis of slope-area measurement 0.7 mi (1.1 km) downstream (adjusted to present site) at gage height 11.90 ft (3.627 m); no flow many days 1965, 1966, and part of July 17, 1968.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,600 ft³/s (45.3 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage Height (ft)	Gage Height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage Height (ft)	Gage Height (m)
Jan. 8	0615	1690	47.9	7.23	2.204	Feb. 26	0615	3510	99.4	9.25	2.819
Jan. 21	0730	2660	75.3	8.45	2.576	July 18	1330	1990	56.4	7.70	2.347
Jan. 24	2200	*6090	172	a10.80	3.29	Sept. 22	Unknown	1610	45.6	7.09	2.161

a from high-water mark.

Minimum discharge, 1.7 ft³/s (.048 m³/s) Nov. 14, gage height, 2.28 ft (0.695 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.8	2.6	32	90	37	122	23	22	35	6.6	27	6.5
2	3.4	2.4	23	534	31	112	24	19	32	7.6	22	6.1
3	2.7	2.2	19	195	27	91	43	18	30	6.2	51	5.9
4	3.4	2.2	62	75	24	81	50	19	92	7.0	39	5.4
5	3.7	2.2	86	51	21	102	55	16	68	8.4	21	5.5
6	5.6	2.1	44	44	18	649	45	14	42	7.0	28	405
7	3.4	2.1	33	54	17	213	30	13	31	5.0	24	70
8	2.7	2.3	38	896	16	107	25	12	26	3.8	14	40
9	3.1	2.1	555	126	15	78	60	11	22	3.0	11	28
10	3.3	2.0	168	75	14	69	95	9.5	19	2.8	14	22
11	3.2	1.9	73	50	13	189	85	8.7	140	2.5	19	18
12	3.0	1.9	55	38	13	78	74	11	100	4.2	223	15
13	3.0	1.9	47	71	12	62	55	12	60	4.1	154	13
14	3.0	1.8	38	127	12	60	100	17	35	7.4	58	17
15	3.6	1.9	31	46	12	46	88	13	25	7.0	40	20
16	3.1	1.9	27	35	11	38	80	9.4	19	11	29	11
17	3.4	3.9	34	28	11	34	66	7.8	14	16	22	9.5
18	3.4	25	25	23	12	30	54	9.6	16	329	21	8.6
19	3.4	8.4	20	21	15	26	39	27	13	47	25	7.9
20	3.7	6.0	19	21	16	23	30	34	9.5	24	16	6.7
21	3.5	5.1	89	1600	20	20	24	20	7.6	18	13	77
22	3.0	4.5	44	304	33	16	19	16	8.2	14	12	570
23	2.6	5.6	33	145	41	22	15	95	14	11	10	95
24	2.6	28	47	1760	540	70	16	521	9.0	168	13	56
25	2.6	13	327	679	931	60	16	450	6.6	57	17	42
26	2.9	9.1	78	129	1200	50	36	149	5.2	39	9.6	34
27	16	8.0	56	102	320	41	90	82	4.8	27	10	27
28	4.7	11	39	81	181	32	37	62	4.5	18	9.5	23
29	3.7	12	29	68	---	35	31	61	9.4	70	10	23
30	2.9	65	26	57	---	29	25	118	8.4	66	12	145
31	2.5	---	28	49	---	26	---	60	---	34	7.5	---
TOTAL	114.9	238.1	2225	7574	3613	2611	1430	1937.0	906.2	1031.6	981.6	1813.1
MEAN	3.71	7.94	71.8	244	129	84.2	47.7	62.5	30.2	33.3	31.7	60.4
MAX	16	65	555	1760	1200	649	100	521	140	329	223	570
MIN	2.5	1.8	19	21	11	16	15	7.8	4.5	2.5	7.5	5.4
CFSM	.14	.31	2.79	9.49	5.02	3.28	1.86	2.43	1.18	1.30	1.23	2.35
IN.	.17	.34	3.22	10.96	5.23	3.78	2.07	2.80	1.31	1.49	1.42	2.62

CAL YR 1978 TOTAL 16512.2 MEAN 45.2 MAX 1710 MIN 1.8 CFSM 1.76 IN 23.90
WTR YR 1979 TOTAL 24475.5 MEAN 67.1 MAX 1760 MIN 1.8 CFSM 2.61 IN 35.43

Note.--No gage-height record March 18 to April 25, May 31 to July 11.

01398000 NESHANIC RIVER AT REAVILLE, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1957, 1962, and 1979.

COOPERATION.--Selected field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)
FEB 05...	1230	37	260	7.1	.0	14.2	--	50	7	69
MAR 28...	1215	32	237	7.8	8.0	14.5	2.0	60	2	65
MAY 22...	1335	16	280	8.3	21.0	11.3	--	230	350	84
AUG 08...	1350	15	254	9.0	27.0	12.5	2.0	330	350	83
SEP 25...	1310	43	252	7.3	15.5	9.5	1.0	1700	130	79

DATE	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
FEB 05...	17	6.5	14	1.6	29	--	36	16	.1
MAR 28...	16	6.1	12	1.5	36	--	31	16	.1
MAY 22...	21	7.6	20	2.0	45	.0	35	25	.1
AUG 08...	22	6.8	15	2.3	45	--	35	21	.1
SEP 25...	20	7.0	13	2.2	29	.0	30	19	.1

DATE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHATE, TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
FEB 05...	14	131	3.4	<.10	--	1.5	4.9	.18	1.6
MAR 28...	11	131	2.2	<.10	--	.80	3.0	.04	2.1
MAY 22...	12	162	2.1	.30	.40	.70	2.8	.24	3.3
AUG 08...	8.7	161	1.2	<1.0	--	1.3	2.5	.26	5.1
SEP 25...	14	151	3.4	.30	.30	.60	4.0	.25	2.0

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
MAY 22...	1335	40	1	0	20	0	20	3
SEP 25...	1310	30	1	0	20	0	10	4

DATE	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	PHENOLS (UG/L)
MAY 22...	300	6	60	<.5	1	0	10	0
SEP 25...	190	3	40	<.5	2	0	20	0

01398045 BACK BROOK TRIBUTARY NEAR RINGOES, NJ

LOCATION.--Lat 40°25'41", long 74°49'52", Hunterdon County, Hydrologic Unit 02030105, on right upstream wingwall of bridge on Wertsville Road, 2.1 mi (3.4 km) east of Ringoes, 1.3 mi (2.1 km) upstream from Back Brook, and 2.3 mi (3.7 km) southwest of Wertsville.

DRAINAGE AREA.--1.98 mi² (5.13 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1977 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 156 ft (47.5 m), from topographic map.

REMARKS.--Water-discharge records fair except those above 200 ft³/s (5.66 m³/s), which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1290 ft³/s (36.5 m³/s) Aug. 3, 1979, (gage height, 5.05 ft or 1.539 m) from rating curve extended above 200 ft³/s (5.66 m³/s); minimum daily, 0.01 ft³/s (0.001 m³/s) Feb. 19, 1979.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 500 ft³/s (14.2 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage Height (ft)	Gage Height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage Height (ft)	Gage Height (m)
Jan. 21	1445	550	15.6	2.75	0.838	Sept. 6	0815	611	17.3	3.18	0.969
Jan. 24	1800	803	22.7	3.77	1.149	Sept. 21	2315	556	15.7	3.10	0.945
Aug. 3	2115	*1290	36.5	a5.05	1.539						

a from peak indicator

Minimum daily discharge, 0.01 ft³/s (0.001 m³/s) Feb. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.13	1.2	8.6	.42	68	1.2	1.0	1.8	.45	1.2	.32
2	.00	.10	.79	68	.32	35	1.4	.70	1.2	.47	8.7	.24
3	.06	.12	.70	11	.28	27	1.8	.70	1.8	.42	13	.24
4	.07	.15	7.4	4.5	.20	20	2.2	.80	4.1	.44	18	.24
5	.00	.12	8.6	3.4	.17	24	3.6	.80	2.6	.48	3.3	.32
6	.08	.10	2.1	3.0	.11	68	2.0	.70	1.4	.34	1.4	256
7	.00	.10	1.3	22	.11	12	1.3	.62	1.2	.24	1.0	32
8	.00	.10	3.2	108	.17	5.3	1.2	.55	.91	.17	.48	4.5
9	.00	.10	72	6.5	.15	3.8	4.5	.48	.70	.15	.32	2.3
10	.00	.10	8.3	3.0	.17	2.9	8.5	.37	.62	.13	.32	1.4
11	.00	.08	3.0	1.9	.19	9.5	3.3	.32	16	.13	.32	.91
12	.00	.10	2.1	1.6	.19	3.8	2.3	.70	5.1	.13	159	.55
13	.00	.08	1.7	3.9	.20	2.8	2.0	.70	2.5	.13	175	.48
14	.07	.10	1.3	6.2	.20	2.8	9.8	1.6	1.4	.15	13	4.3
15	.08	.12	1.3	2.6	.15	2.2	6.9	1.0	1.2	.17	4.3	2.2
16	.08	.12	1.1	1.5	.11	1.4	3.8	.62	.94	.32	2.6	.70
17	.10	.22	1.5	1.2	.09	1.2	2.6	.48	.80	.28	1.8	.48
18	.10	1.5	1.3	1.2	.08	1.2	2.2	.55	.84	43	1.8	.42
19	.12	.26	1.1	1.3	.10	1.2	1.6	3.6	.74	4.5	2.3	.32
20	.12	.22	.98	2.2	.08	1.2	1.2	2.9	.60	1.4	1.3	.20
21	.12	.13	7.7	204	.62	.91	1.2	1.6	.48	1.0	.91	77
22	.12	.15	2.4	8.9	14	.70	1.0	1.0	.52	.70	.70	202
23	.12	.18	1.9	3.4	14	.70	.70	23	.70	.70	.55	31
24	.12	.79	16	234	278	6.4	.80	61	.62	5.3	.55	5.7
25	.12	.30	32	14	335	5.3	.80	66	.42	2.8	.70	2.6
26	.15	.30	4.5	4.1	293	2.8	.91	6.6	.26	1.2	.48	1.8
27	.62	.30	2.6	3.1	159	2.0	7.9	3.4	.20	.91	.48	1.3
28	.18	.47	1.7	2.3	144	1.3	2.6	2.5	.28	.80	.55	.91
29	.13	1.5	1.5	1.4	---	1.6	2.2	2.9	.53	3.3	.42	1.8
30	.12	4.5	.98	1.0	---	1.3	1.3	4.0	.51	4.1	.42	47
31	.15	---	1.5	.70	---	1.3	---	2.3	---	1.6	.37	---
TOTAL	2.83	12.54	193.75	738.50	1241.11	317.61	82.81	193.49	50.97	75.91	415.27	679.23
MEAN	.091	.42	6.25	23.8	44.3	10.2	2.76	6.24	1.70	2.45	13.4	22.6
MAX	.62	4.5	72	234	335	68	9.8	66	16	43	175	256
MIN	.00	.08	.70	.70	.08	.70	.70	.32	.20	.13	.32	.20
CFSM	.05	.21	3.16	12.0	22.4	5.15	1.39	3.15	.86	1.24	6.77	11.4
IN.	.05	.24	3.64	13.87	23.31	5.96	1.56	3.63	.96	1.43	7.80	12.75

CAL YR 1978 TOTAL 1532.82 MEAN 4.20 MAX 216 MIN .00 CFSM 2.12 IN 28.78
WTR YR 1979 TOTAL 4004.02 MEAN 11.0 MAX 335 MIN .00 CFSM 5.56 IN 75.19

01398102 SOUTH BRANCH RARITAN RIVER AT SOUTH BRANCH, NJ

LOCATION.--Lat 40°32'48", long 74°41'48", Somerset County, Hydrologic Unit 02030105, at bridge on Studdiford Drive in South Branch, 0.8 mi (1.3 km) upstream from mouth, and 2.7 mi (4.3 km) southeast of Readington.

DRAINAGE AREA.--265 mi² (686 km²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)
FEB 05...	1350	712	230	7.9	.0	14.0	--	40	14
MAR 28...	1340	514	193	7.7	7.5	11.6	3.0	<20	8
MAY 31...	1120	652	190	6.8	18.0	8.4	2.0	1300	8

DATE	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)
FEB 05...	70	17	6.8	10	1.5	41	--	24	15
MAR 28...	58	14	5.7	8.9	1.4	30	--	22	15
MAY 31...	65	16	6.2	8.8	1.1	37	.0	22	13

DATE	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHATE, TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
FEB 05...	.1	12	118	1.7	<1.0	1.8	3.5	.36	5.0
MAR 28...	.1	9.5	107	1.2	<.10	.50	1.7	.15	2.5
MAY 31...	.1	11	118	1.9	<.10	.30	2.2	.28	3.6

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
MAY 31...	1120	130	3	0	7	0	30	5

DATE	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	PHENOLS (UG/L)
MAY 31...	1000	2	70	<.5	8	0	20	0

01398107 HOLLAND BROOK AT READINGTON, NJ

LOCATION.--Lat 40°33'30", long 74°43'50", Somerset County, Hydrologic Unit 02030105, on right bank 15 ft (4.6 m) downstream from bridge on Old York Road, 0.9 mi (1.4 km) southeast of Readington, and 2.5 mi (4.0 km) upstream from mouth.

DRAINAGE AREA.--9.51 mi² (24.63 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1978 to current year.

GAGE.--Water-stage recorder above a concrete parking-block control. Datum of gage is 77.65 ft (23.668 m) National Geodetic Vertical Datum of 1929 (levels by Somerset County).

REMARKS.--Water-discharge records fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,430 ft³/s (40.5 m³/s) Jan. 24, 1979, gage height, 6.47 ft (1.972 m); minimum daily, 1.0 ft³/s (0.028 m³/s) Sept. 5, 1979.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 400 ft³/s (11.3 m³/s) and maximum(*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage Height (ft)	Gage Height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage Height (ft)	Gage Height (m)
Jan. 8	1050	530	15.0	4.54	1.384	Feb. 26	0655	771	21.8	5.17	1.576
Jan. 21	0640	1040	29.5	5.65	1.722	May 25	0545	509	14.4	4.48	1.366
Jan. 24	2305	*1430	40.5	6.47	1.972	Sept. 22	0150	493	14.0	4.43	1.350

Minimum daily discharge, 1.0 ft³/s (0.028 m³/s) Sept. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.2	3.8	11	42	46	52	5.4	7.1	15	3.9	2.8	1.3
2	4.0	3.9	8.7	175	41	48	6.7	5.7	12	3.9	2.6	1.2
3	3.5	4.0	7.4	104	40	43	7.4	5.4	11	3.3	2.6	1.1
4	3.7	4.2	16	63	40	40	9.1	6.1	12	3.1	2.4	1.1
5	3.7	4.4	28	52	37	42	19	4.8	11	2.8	2.2	1.0
6	3.9	4.6	15	48	38	180	16	4.5	11	2.5	1.9	78
7	3.5	4.8	13	52	32	98	13	4.2	8.8	2.4	2.1	26
8	3.4	4.8	17	308	31	62	9.6	3.9	7.8	2.1	2.2	14
9	3.6	4.6	180	86	23	50	25	3.7	6.8	2.1	2.2	9.4
10	3.5	4.7	52	63	21	47	50	3.4	5.6	1.9	2.8	7.3
11	3.6	4.8	24	52	17	71	36	3.4	44	2.1	3.1	6.4
12	3.7	4.9	20	47	17	52	25	3.2	30	1.9	20	5.2
13	1.8	3.0	16	61	19	45	16	3.2	26	1.9	20	4.8
14	3.0	2.8	13	70	17	43	51	3.4	17	1.8	10	7.8
15	3.2	2.8	10	49	20	38	46	3.9	13	1.8	6.8	6.0
16	3.3	2.9	9.1	45	22	33	31	3.7	10	7.3	5.6	4.8
17	3.4	3.5	11	42	24	32	20	3.4	9.4	5.2	4.2	4.5
18	3.5	7.8	8.7	38	19	31	14	3.2	7.8	6.4	4.5	4.2
19	4.0	4.3	7.8	36	18	28	11	3.4	6.0	3.3	4.2	3.9
20	4.2	4.0	7.4	36	16	27	8.7	4.2	4.8	2.6	3.3	3.6
21	4.2	3.7	27	504	16	27	7.4	3.7	3.6	2.4	3.1	32
22	4.2	3.7	17	91	20	22	6.4	4.2	3.6	2.2	2.6	152
23	4.1	4.0	14	61	25	21	5.7	33	3.6	2.1	2.4	39
24	3.9	8.3	19	414	168	29	4.8	147	2.8	12	3.1	22
25	4.1	4.8	93	245	261	40	5.1	173	2.6	5.6	2.4	15
26	5.1	3.4	37	85	395	34	8.7	83	2.4	3.9	1.9	11
27	7.0	3.2	23	69	92	27	24	57	2.6	3.1	1.8	9.4
28	3.5	4.2	15	63	63	23	13	34	2.6	2.1	1.7	8.3
29	3.2	4.8	20	57	---	23	10	27	4.8	6.4	1.7	7.8
30	3.1	19	23	52	---	20	7.8	26	4.2	5.6	1.7	27
31	3.5	---	23	50	---	12	---	19	---	3.6	1.3	---
TOTAL	116.6	143.7	786.1	3160	1578	1340	512.8	690.7	301.8	111.4	129.2	515.1
MEAN	3.76	4.79	25.4	102	56.4	43.2	17.1	22.3	10.1	3.59	4.17	17.2
MAX	7.0	19	180	504	395	180	51	173	44	12	20	152
MIN	1.8	2.8	7.4	36	16	12	4.8	3.2	2.4	1.8	1.3	1.0
CFSM	.40	.50	2.67	10.7	5.93	4.54	1.80	2.35	1.06	.38	.44	1.81
IN.	.46	.56	3.07	12.36	6.17	5.24	2.01	2.70	1.18	.44	.51	2.01

WTR YR 1979 TOTAL 9385.4 MEAN 25.7 MAX 504 MIN 1.0 CFSM 2.70 IN 36.71

01398260 NORTH BRANCH RARITAN RIVER NEAR CHESTER, NJ

LOCATION.--Lat 40°46'16", long 74°37'34", Morris County, Hydrologic Unit 02030105, at bridge on State Route 24, 0.8 mi (1.3 km) upstream from Burnett Brook, and 3.8 mi (6.1 km) east of Chester.

DRAINAGE AREA.--7.57 mi^2 (19.61 km^2).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1964-65, 1967, 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)
JAN 29...	1020	160	7.2	2.5	12.5	--	130	17	46
MAR 21...	1020	176	7.4	7.0	11.4	1.0	<20	<2	49
MAY 17...	1000	190	8.0	13.0	10.2	3.0	330	70	57
AUG 06...	1030	170	7.3	20.5	8.3	--	490	540	60

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
JAN 29...	11	4.5	14	1.2	19	--	14	26	.1
MAR 21...	12	4.7	10	1.1	29	--	15	23	.1
MAY 17...	14	5.4	13	1.4	32	.0	15	20	.0
AUG 06...	15	5.4	11	1.7	38	--	15	17	.1

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHATE, TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
JAN 29...	13	95	.90	.30	.50	.80	1.7	.28	2.0
MAR 21...	15	109	1.0	.50	.50	1.0	2.0	.54	2.1
MAY 17...	17	124	1.5	.40	1.1	1.5	3.0	1.2	2.7
AUG 06...	17	111	1.8	<.10	--	1.3	3.1	1.0	8.2

DATE	TIME	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	BORON, TOTAL RECOV-ERABLE (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)
MAY 17...	1000	20	1	0	30	1	20	2

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	PHENOLS (UG/L)
MAY 17...	150	5	10	<.5	10	0	10	0

01398500 NORTH BRANCH RARITAN RIVER NEAR FAR HILLS, NJ

LOCATION.--Lat 40°42'30", long 74°38'11", Somerset County, Hydrologic Unit 02030105, on left bank 75 ft (23 m) upstream from Ravine Lake Dam, 1.6 mi (2.6 km) north of Far Hills, and 2.3 mi (3.7 km) upstream from Peapack Brook. Water-quality samples collected at bridge 900 ft (274 m) downstream from gage.

DRAINAGE AREA.--26.2 mi² (67.9 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1921 to September 1975, October 1977 to current year. Operated as crest-stage gage water years 1976-77. Monthly discharge only for some periods, published in WSP 1302.

REVISED RECORDS.--WSP 781: Drainage area. WSP 1552: 1922-23, 1924-25(M), 1935(M). WSP 1902: 1954.

GAGE.--Water-stage recorder above masonry dam. Datum of gage is 224.49 ft (68.425 m) National Geodetic Vertical Datum of 1929 (New Jersey Geological Survey bench mark). Prior to June 18, 1925, nonrecording gage in stilling box at left end of dam at same datum.

REMARKS.--Water-discharge records fair. Records given herein include diversion by small turbine at dam to fountain and returned to river 1,000 ft (300 m) downstream from Ravine Lake Dam. Flow regulated occasionally by operation of waste gate in dam.

AVERAGE DISCHARGE.--56 years (1921-75, 1978-79) 47.9 ft³/s (1.356 m³/s), 24.83 in/yr (631 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,390 ft³/s (181 m³/s) Aug. 28, 1971, gage height, 7.28 ft (2.219 m) from rating curve extended above 2,000 ft³/s (57 m³/s) on basis of computation of peak flow over dam; no flow at times when Ravine Lake was filling.

EXTREMES OUTSIDE PERIOD OF RECORD.--Stage of 7.6 ft (2.3 m), from floodmark, occurred July 23, 1919, discharge about 7,000 ft³/s (200 m³/s).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 700 ft³/s (19.8 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage Height (ft)	Gage Height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage Height (ft)	Gage Height (m)
Jan. 8	0405	862	24.4	3.67	1.119	Mar. 6	1200	770	21.8	3.55	1.082
Jan. 21	0825	1250	35.4	4.07	1.241	Aug. 3	2200	1060	30.0	3.95	1.204
Jan. 24	2225	*3780	107.0	5.93	1.807	Sept. 6	1100	1390	39.4	4.28	1.305
Feb. 26	0600	1480	41.9	4.29	1.308	Sept. 22	0300	714	20.2	3.48	1.061

Minimum discharge, 7.8 ft³/s (0.221 m³/s) Oct. 1, 3, 4, 8, 9, 10, gage height, 1.90 ft (0.579 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.4	10	29	86	69	101	59	60	47	29	16	22
2	10	11	21	240	63	97	75	57	47	28	15	19
3	8.9	11	18	141	57	82	79	54	107	26	107	49
4	8.3	11	31	63	54	69	75	60	77	24	96	30
5	11	12	40	54	49	79	83	54	56	28	44	23
6	11	12	28	52	42	407	66	51	49	22	41	473
7	10	11	20	60	41	193	63	49	44	21	62	99
8	8.9	11	20	508	41	136	63	47	42	20	47	65
9	8.3	10	141	136	40	160	109	47	39	19	41	42
10	8.3	10	66	97	39	161	113	47	39	19	37	51
11	8.9	10	37	79	38	245	63	44	129	18	54	41
12	13	9.4	30	69	39	174	57	46	74	17	129	36
13	10	9.4	28	83	37	156	60	54	46	17	92	32
14	11	9.4	26	141	35	146	122	54	41	17	36	37
15	15	9.4	24	72	34	141	94	51	39	25	31	68
16	12	10	21	60	33	101	72	42	37	46	28	42
17	11	11	25	54	33	90	66	36	34	59	25	31
18	10	40	22	52	31	83	60	39	36	32	24	27
19	10	26	18	44	35	75	60	62	33	33	32	28
20	11	16	18	49	46	72	57	74	32	23	28	25
21	11	14	57	746	54	69	54	37	31	19	23	36
22	10	12	34	224	65	67	52	39	31	18	22	279
23	10	13	28	127	75	63	52	56	39	17	20	65
24	9.4	44	25	968	299	117	52	226	32	15	22	49
25	8.3	26	72	683	414	120	49	215	31	15	28	45
26	9.4	17	42	208	521	69	54	129	29	15	31	43
27	20	15	32	160	146	63	198	85	28	20	23	46
28	16	15	26	127	109	60	105	71	25	15	20	41
29	12	15	24	101	---	72	83	71	28	17	46	40
30	11	34	26	83	---	66	69	59	30	27	59	51
31	10	---	27	72	---	60	---	56	---	19	29	---
TOTAL	333.1	464.6	1056	5639	2539	3594	2264	2072	1352	720	1308	1935
MEAN	10.7	15.5	34.1	182	90.7	116	75.5	66.8	45.1	23.2	42.2	64.5
MAX	20	44	141	968	521	407	198	226	129	59	129	473
MIN	8.3	9.4	18	44	31	60	49	36	25	15	15	19
CFSM	.41	.59	1.30	6.95	3.46	4.43	2.88	2.55	1.72	.89	1.61	2.46
IN.	.47	.66	1.50	8.01	3.60	5.10	3.21	2.94	1.92	1.02	1.86	2.75

CAL YR 1978 TOTAL 20156.9 MEAN 55.2 MAX 675 MIN 8.3 CFSM 2.11 IN 28.62
WTR YR 1979 TOTAL 23276.7 MEAN 63.8 MAX 968 MIN 8.3 CFSM 2.44 IN 33.05

01398500 NORTH BRANCH RARITAN RIVER NEAR FAR HILLS, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1963 to current year.

COOPERATION.--Selected field data and samples for laboratory analyses supplied by the New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)
JAN 29...	1230	131	141	7.1	3.0	13.4	--	50	240	34
MAR 21...	1200	72	185	7.2	7.0	11.3	2.0	<20	<2	48
MAY 17...	1145	40	167	9.0	18.0	9.4	5.0	20	<2	56
AUG 06...	1245	40	118	7.4	25.0	8.0	--	230	>2400	39

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
JAN 29...	8.4	3.2	9.8	1.2	16	--	15	17	.1
MAR 21...	12	4.4	7.9	1.0	27	--	17	16	.1
MAY 17...	14	5.2	9.6	1.2	34	.0	15	15	.1
AUG 06...	9.9	3.4	5.7	1.6	22	--	12	9.6	.1

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHATE, TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
JAN 29...	13	75	<1.0	<.10	--	.75	--	.19	1.9
MAR 21...	15	97	1.0	<.10	--	.80	1.8	.16	2.2
MAY 17...	15	102	<1.0	.20	.60	.80	--	.10	4.4
AUG 06...	12	85	<.10	.70	.80	1.5	--	.10	19

DATE	TIME	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	BORON, TOTAL RECOV-ERABLE (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)
MAY 17...	1145	20	0	0	20	1	20	4

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	PHENOLS (UG/L)
MAY 17...	310	7	60	<.5	10	0	20	0

01399120 NORTH BRANCH RARITAN RIVER AT BURNT MILLS, NJ

LOCATION.--Lat 40°38'09", long 74°40'56", Somerset County, Hydrologic Unit 02030105, at bridge on Burnt Mills Road in Burnt Mills, 0.1 mi (0.2 km) upstream from Lamington River, and 4.0 mi (6.4 km) southwest of Far Hills.

DRAINAGE AREA.--63.8 mi² (165.2 km²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1964, 1977 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)
JAN 29...	1350	400	154	7.2	3.5	13.2	--	E230	E46
MAR 21...	1345	142	192	7.8	9.0	11.4	2.0	<20	5
MAY 17...	1330	63	204	8.1	18.5	11.8	2.0	3500	33
AUG 06...	1400	45	160	7.9	26.0	9.8	--	1700	350

DATE	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)
JAN 29...	54	13	5.2	10	1.3	24	--	18	18
MAR 21...	57	14	5.4	8.5	1.1	30	--	19	16
MAY 17...	71	18	6.4	10	1.3	43	.0	18	16
AUG 06...	59	15	5.3	8.0	1.7	43	--	16	12

DATE	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHATE, TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
JAN 29...	.1	13	87	.90	<1.0	.54	1.4	.16	1.8
MAR 21...	.1	14	109	1.0	<.10	.80	1.8	.10	3.1
MAY 17...	.1	14	125	1.0	<.10	.70	1.7	.17	2.6
AUG 06...	.1	13	109	<1.0	<.10	1.0	--	.30	5.9

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
MAY 17...	1330	10	1	0	30	1	20	2

DATE	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	PHENOLS (UG/L)
MAY 17...	260	0	50	<.5	12	0	20	0

01399190 LAMINGTON (BLACK) RIVER AT SUCCASUNNA, NJ

LOCATION.--Lat 40°51'03", long 74°38'02", Morris County, Hydrologic Unit 02030105, on right bank, 10 ft (3 m) upstream from bridge on Righter Road, 0.7 mi (1.1 km) south of Succasunna, and 0.4 mi (0.6 km) upstream from Succasunna Brook.

DRAINAGE AREA.--7.37 mi² (19.09 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1976 to current year.

GAGE.--Water-stage recorder above prefabricated concrete bumper-block control. Altitude of the gage is 695 ft (212 m), from topographic map.

REMARKS.--Water-discharge records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 176 ft³/s (4.98 m³/s) Jan. 24, 1979, gage height, 5.20 ft (1.585 m); minimum discharge 1.6 ft³/s (0.05 m³/s) Sept. 15, 1977, gage height, 2.34 ft (0.713 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 40 ft³/s (1.13 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage Height (ft)	Gage Height (m)
Jan. 8	0945	49	1.39	3.95	1.204
Jan. 21	Unknown	70	1.98	4.26	1.298
Jan. 24	Unknown	*176	4.98	5.20	1.585
Feb. 26	0715	74	2.10	4.32	1.317
Mar. 6	1830	51	1.44	3.99	1.216
Sept. 6	1145	75	2.12	4.33	1.320
Sept. 22	0400	43	1.22	3.84	1.170

Minimum discharge, 2.2 ft³/s (0.06 m³/s) Nov. 12, gage height, 2.49 ft (0.759 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.5	3.5	6.3	11	26	35	16	18	19	9.9	5.9	8.7
2	4.2	3.3	5.3	23	21	30	16	16	18	9.5	5.7	8.1
3	3.5	3.2	4.6	30	20	25	16	15	19	8.7	9.3	9.9
4	4.1	3.3	5.5	20	18	23	17	16	23	8.7	15	8.1
5	4.6	3.4	7.0	16	16	22	17	15	20	8.9	12	7.0
6	4.5	3.4	6.1	14	14	40	15	14	19	7.9	10	43
7	4.2	3.0	5.0	15	13	46	14	13	16	7.2	8.5	44
8	4.1	2.8	4.9	41	12	41	13	12	15	7.2	7.2	32
9	3.9	2.7	8.3	35	12	35	16	11	14	7.0	6.1	21
10	3.7	2.7	11	28	11	29	23	11	14	6.3	5.9	15
11	3.2	2.7	10	22	11	36	21	11	21	6.1	6.8	11
12	3.2	2.7	8.0	20	10	28	19	11	25	6.1	15	9.5
13	3.3	2.8	6.8	19	9.9	26	17	12	22	5.9	19	8.7
14	3.9	2.6	6.0	23	9.7	24	21	12	18	6.6	14	11
15	4.4	2.6	5.7	20	9.5	22	23	11	15	7.2	11	14
16	4.1	2.6	5.6	17	9.3	21	20	10	14	12	9.3	11
17	3.5	2.8	5.5	15	8.9	20	19	9.5	13	20	8.1	9.2
18	3.4	5.4	5.4	14	8.5	19	18	10	13	15	8.3	7.7
19	3.3	5.1	5.0	13	8.3	17	17	14	11	12	9.3	7.3
20	3.5	4.4	5.1	13	8.5	16	16	16	11	9.7	8.5	6.7
21	3.5	3.5	9.2	48	9.1	15	16	13	10	8.7	7.2	11
22	3.5	3.2	8.1	44	10	15	16	11	10	8.3	6.8	36
23	3.5	3.5	7.1	35	11	15	15	13	12	7.9	6.3	28
24	3.2	6.5	6.5	63	27	20	14	25	11	6.8	6.8	20
25	3.2	5.3	10	108	49	27	14	33	9.7	6.8	7.2	14
26	3.2	4.6	8.5	82	63	23	15	34	8.9	6.6	8.1	12
27	4.6	4.4	6.9	62	53	19	27	30	8.7	6.6	7.2	11
28	4.5	4.0	6.1	49	43	17	27	26	8.5	6.1	6.3	11
29	4.4	4.2	5.6	40	---	17	24	23	8.7	6.8	9.1	11
30	4.1	5.3	5.1	33	---	17	20	21	9.5	7.5	12	12
31	3.7	---	5.4	30	---	16	---	21	---	6.3	9.9	---
TOTAL	118.5	109.5	205.6	1003	521.7	756	542	507.5	437.0	260.3	281.8	458.9
MEAN	3.82	3.65	6.63	32.4	18.6	24.4	18.1	16.4	14.6	8.40	9.09	15.3
MAX	4.6	6.5	11	108	63	46	27	34	25	20	19	44
MIN	3.2	2.6	4.6	11	8.3	15	13	9.5	8.5	5.9	5.7	6.7
CFSM	.52	.50	.90	4.40	2.52	3.31	2.46	2.23	1.98	1.14	1.23	2.08
IN.	.60	.55	1.04	5.06	2.63	3.82	2.74	2.56	2.21	1.31	1.42	2.32

CAL YR 1978 TOTAL 4406.4 MEAN 12.1 MAX 46 MIN 2.6 CFSM 1.64 IN 22.24
WTR YR 1979 TOTAL 5201.8 MEAN 14.3 MAX 108 MIN 2.6 CFSM 1.94 IN 26.25

01399200 LAMINGTON (BLACK) RIVER NEAR IRONIA, NJ

LOCATION.--Lat 40°50'07", long 74°38'40", Morris County, Hydrologic Unit 02030105, on left bank 15 ft (4.5 m) upstream from bridge on Ironia Road, 1.0 mi (1.6 km) below Succasunna Brook, 1.3 mi (2.1 km) northwest of Ironia, and 4.4 mi (7.1 km) northeast of Chester.

DRAINAGE AREA.--10.9 mi² (28.2 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1975 to current year.

GAGE.--Water-stage recorder above prefabricated concrete bumper-block control. Altitude of gage is 681 ft (208 m), from topographic map.

REMARKS.--Water-discharge records poor. Water for municipal supply pumped from wells upstream of gage by Morris County Municipal Utilities Authority.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 348 ft³/s (9.86 m³/s) Jan. 25, 1979, gage height, 5.27 ft (1.606 m); minimum daily discharge, 2.6 ft³/s (0.07 m³/s) Sept. 16, 17, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 80 ft³/s (2.27 m³/s) and maximum(*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage Height (ft)	Gage Height (m)
Jan. 8	1330	113	3.20	3.73	1.137
Jan. 21	1745	168	4.76	4.20	1.280
Jan. 25	0300	*348	9.86	5.27	1.606
Feb. 26	1145	147	4.16	4.03	1.228
Mar. 6	2400	93	2.63	3.53	1.076
Sept. 6	2100	171	4.84	4.56	1.390

Minimum discharge, 4.9 ft³/s (0.139 m³/s) Nov. 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.8	5.4	16	32	39	53	25	27	28	15	8.7	12
2	5.6	4.9	12	62	31	48	26	24	27	14	8.4	11
3	5.6	4.9	9.9	76	25	45	29	22	28	13	14	16
4	6.9	4.8	15	56	22	42	29	24	34	13	32	14
5	15	5.1	20	39	19	40	29	22	29	13	21	10
6	13	5.1	15	31	16	63	25	21	28	12	14	77
7	11	4.8	11	28	15	76	22	19	24	11	14	113
8	8.8	4.5	11	96	13	57	21	18	22	11	12	57
9	7.9	4.3	34	83	13	49	27	16	21	10	9.2	36
10	7.3	4.3	46	76	12	46	39	16	21	9.3	8.0	27
11	6.2	4.3	34	68	12	51	34	16	31	9.0	9.0	21
12	5.6	4.1	22	66	11	52	28	16	37	9.0	20	18
13	5.8	4.3	17	64	11	42	24	18	32	8.7	38	16
14	6.5	4.1	14	63	11	39	30	18	27	9.7	26	17
15	8.8	3.8	11	58	11	37	39	16	22	11	17	28
16	7.7	4.1	10	51	10	35	32	15	21	18	13	23
17	6.3	4.5	11	46	9.9	31	27	14	19	29	12	18
18	5.4	16	9.9	41	9.4	29	25	15	19	22	11	14
19	5.3	16	7.9	35	9.2	28	23	21	16	18	13	13
20	6.0	9.9	7.7	33	9.6	26	22	24	16	14	12	12
21	6.0	6.9	23	132	12	24	22	19	15	13	11	13
22	5.4	5.8	25	125	19	24	22	16	15	12	9.7	60
23	5.3	6.0	17	103	35	24	21	19	18	12	9.0	49
24	4.6	22	15	127	64	28	18	37	16	10	9.2	28
25	4.3	17	24	241	102	45	21	49	14	10	10	18
26	4.5	9.9	30	137	123	38	22	50	13	9.7	12	13
27	8.3	7.9	21	103	85	31	40	44	13	9.7	11	11
28	8.8	8.1	18	87	64	26	40	38	13	9.0	9.0	8.8
29	6.9	8.1	17	72	---	28	35	34	13	10	10	8.6
30	6.5	16	17	58	---	28	29	31	14	11	22	9.9
31	5.6	---	15	46	---	26	---	31	---	9.3	16	---
TOTAL	216.7	226.9	556.4	2335	813.1	1211	826	750	646	385.4	441.2	772.3
MEAN	6.99	7.56	17.9	75.3	29.0	39.1	27.5	24.2	21.5	12.4	14.2	25.7
MAX	15	22	46	241	123	76	40	50	37	29	38	113
MIN	4.3	3.8	7.7	28	9.2	24	18	14	13	8.7	8.0	8.6
CFSM	.64	.69	1.64	6.91	2.66	3.59	2.52	2.22	1.97	1.14	1.30	2.36
IN.	.74	.77	1.90	7.97	2.77	4.13	2.82	2.56	2.20	1.32	1.51	2.64

CAL YR 1978 TOTAL 7507.7 MEAN 20.6 MAX 140 MIN 3.8 CFSM 1.89 IN 25.62
WTR YR 1979 TOTAL 9180.0 MEAN 25.2 MAX 241 MIN 3.8 CFSM 2.31 IN 31.33

NOTE.--No gage-height record from Jan. 8 to Feb. 23.

01399200 LAMINGTON (BLACK) RIVER NEAR IRONIA, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1977 to current year.

COOPERATION.--Selected field data and samples for laboratory analyses supplied by the New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)
FEB 22...	1045	E19	382	7.4	.0	11.2	7.0	<20	<2	86
APR 11...	1015	34	307	7.6	8.0	9.7	3.0	230	<2	82
MAY 30...	1000	12	303	7.9	16.0	7.6	6.0	270	49	85
AUG 14...	1015	27	265	7.2	18.0	6.1	1.0	490	350	80

DATE	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
FEB 22...	21	8.1	33	2.1	67	--	23	50	.1
APR 11...	20	7.8	27	2.0	63	--	20	35	.1
MAY 30...	21	7.8	23	1.9	62	.0	21	33	.1
AUG 14...	20	7.4	20	1.6	61	--	21	26	.1

DATE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHATE, TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
FEB 22...	10	206	2.3	.70	.90	1.6	3.9	1.5	7.8
APR 11...	9.3	174	1.4	.70	.70	1.4	2.8	.54	3.6
MAY 30...	9.4	173	1.5	.20	4.1	4.3	5.8	1.0	4.8
AUG 14...	7.8	159	1.0	.50	.80	1.3	2.3	.19	5.4

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
MAY 30...	1000	110	3	0	30	0	20	9

DATE	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	PHENOLS (UG/L)
MAY 30...	720	5	170	<.5	10	0	30	0

01399500 LAMINGTON (BLACK) RIVER NEAR POTTERSVILLE, NJ

LOCATION.--Lat 40°43'39", long 74°43'50", Morris County, Hydrologic Unit 02030105, on right bank 1.1 mi (1.8 km) upstream from bridge on State Highway 512, 1.2 mi (1.9 km) northwest of Pottersville, and 5.5 mi (8.[illegible] km) upstream from Cold Brook.

DRAINAGE AREA.--32.8 mi² (85.0 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1921 to current year. Monthly discharge only for October and November 1921, published in WSP 1302. Prior to October 1952, published as "Black River near Pottersville".

REVISED RECORDS.--WSP 741: 1932. WSP 781: Drainage area. WSP 1552: 1922, 1924-29(M), 1931(M), 1933-34(M), 1938(P), 1939(M), 1940, 1941(M), 1942-46(P), 1947(M), 1948-49(P), 1951-52(P), 1953(M).

GAGE.--Water-stage recorder. Concrete control since July 1, 1937. Datum of gage is 284.14 ft (86.606 m) National Geodetic Vertical Datum of 1929 (levels from New Jersey Geological Survey bench mark). Prior to July 1, 1922, nonrecording gage on downstream side of highway bridge at Pottersville, 1.1 mi (1.8 km) downstream at different datum.

REMARKS.--Records excellent. Flow regulated occasionally by pond above station.

AVERAGE DISCHARGE.--57 years, 55.6 ft³/s (1.575 m³/s), 23.02 in/yr (585 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,700 ft³/s (76.5 m³/s) Aug. 28, 1971 (gage height, 5.39 ft or 1.643 m) from rating curve extended above 380 ft³/s (10.8 m³/s) on basis of slope-area measurement at gage height, 4.71 ft (1.436 m); minimum, 1.3 ft³/s (0.037 m³/s) Oct. 4, 1930.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 380 ft³/s (10.8 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage Height (ft)	Gage Height (m)
Jan. 9	0315	451	12.8	3.18	0.969
Jan. 26	0815	*670	19.0	3.54	1.079

Minimum discharge, 14 ft³/s (0.40 m³/s) July 27, 30, gage height, 1.55 ft (0.472 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	16	34	70	112	196	76	87	80	33	24	35
2	15	15	32	161	96	178	82	76	72	33	23	37
3	14	15	29	153	84	153	85	69	104	31	37	52
4	19	15	33	127	74	133	83	68	91	32	52	41
5	20	14	44	124	66	133	89	61	78	33	35	37
6	20	14	41	87	61	277	78	57	73	30	45	336
7	18	14	35	94	51	262	71	54	69	29	49	164
8	18	14	31	317	49	216	68	51	64	28	44	146
9	18	14	110	177	46	170	87	48	59	26	37	152
10	17	13	99	167	44	150	100	45	55	25	32	131
11	16	13	88	142	43	178	84	42	112	24	32	100
12	16	13	66	142	41	143	84	43	103	23	73	78
13	15	13	51	103	40	130	79	48	81	22	76	63
14	16	13	44	121	40	117	105	53	84	44	48	64
15	17	13	39	98	39	115	100	53	77	32	55	65
16	15	14	36	91	37	103	88	50	65	48	55	50
17	16	17	34	86	35	97	87	45	57	46	47	49
18	15	37	31	75	34	92	80	47	51	40	41	50
19	15	29	29	69	33	86	73	56	46	51	38	48
20	16	27	30	63	34	82	66	63	41	57	32	44
21	15	27	55	458	48	78	61	58	39	58	28	86
22	15	25	42	305	74	74	57	56	39	49	26	207
23	15	22	39	222	90	71	55	82	41	39	25	113
24	14	42	40	725	273	104	53	173	37	33	27	115
25	14	32	69	905	394	119	52	197	36	29	27	113
26	14	29	50	643	670	100	68	164	35	31	26	98
27	22	27	43	440	365	101	149	152	33	32	24	81
28	19	25	48	308	219	93	111	136	33	25	23	68
29	19	26	53	219	---	90	113	118	34	29	46	61
30	18	36	36	158	---	83	101	105	35	31	48	64
31	17	---	33	130	---	78	---	92	---	26	34	---
TOTAL	514	624	1444	6980	3192	4002	2485	2449	1824	1069	1209	2748
MEAN	16.6	20.8	46.6	225	114	129	82.8	79.0	60.8	34.5	39.0	91.6
MAX	22	42	110	905	670	277	149	197	112	58	76	336
MIN	14	13	29	63	33	71	52	42	33	22	23	35
CFSM	.51	.63	1.42	6.86	3.48	3.93	2.52	2.41	1.85	1.05	1.19	2.79
IN.	.58	.71	1.64	7.92	3.62	4.54	2.82	2.78	2.07	1.21	1.37	3.12

CAL YR 1978 TOTAL 22257 MEAN 61.0 MAX 411 MIN 13 CFSM 1.86 IN 25.24
WTR YR 1979 TOTAL 28540 MEAN 78.2 MAX 905 MIN 13 CFSM 2.38 IN 32.37

01399500 LAMINGTON (BLACK) RIVER NEAR POTTERSVILLE, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1977 to current year.

COOPERATION.--Selected field data and samples for laboratory analyses supplied by the New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)
FEB										
22...	1240	E74	225	7.4	.0	13.2	3.0	20	240	55
APR										
11...	1230	84	173	7.8	9.0	11.4	2.0	230	<2	46
MAY										
30...	1220	105	170	8.2	16.0	9.6	1.0	20	79	49
AUG										
14...	1230	47	158	7.5	18.0	9.2	<1.0	130	>2400	46

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
FEB									
22...	13	5.5	19	1.5	33	17	28	.1	13
APR									
11...	11	4.4	12	1.2	31	14	18	.1	6.4
MAY									
30...	12	4.6	12	.7	38	14	17	.1	11
AUG									
14...	11	4.5	11	1.3	33	12	15	.1	13

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHATE, TOTAL (MG/L AS PO4)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
FEB									
22...	132	1.3	.20	.60	.80	2.1	.14	--	1.6
APR									
11...	94	<1.0	<.10	--	.60	--	.11	<.01	4.0
MAY									
30...	105	<1.0	<.10	--	1.2	--	.33	--	7.8
AUG									
14...	102	<1.0	.40	1.6	2.0	--	.11	--	11

01399510 UPPER COLD BROOK NEAR POTTERSVILLE, NJ

LOCATION.--Lat 40°43'16", long 74°45'09", Hunterdon County, Hydrologic Unit 02030105, on right bank along a private dirt road, 400 ft (122 m) downstream from the Pottersville Reservoir, and 1.5 mi (2.4 km) west of Pottersville.

DRAINAGE AREA.--2.18 mi² (5.65 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1972 to current year.

GAGE.--Water-stage recorder above a rock outcrop control. Datum of gage is 451.57 ft (137.639 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records good except those above 50 ft³/s (1.42 m³/s), which are poor. Flow regulated by Pottersville Reservoir 400 ft (122 m) above station.

AVERAGE DISCHARGE.--7 years, 4.08 ft³/s (0.116 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 197 ft³/s (5.58 m³/s) July 20, 1975, gage height, 2.85 ft (0.869 m); maximum gage height, 3.17 ft (0.966 m) Jan. 24, 1979, minimum daily discharge, 0.08 ft³/s (0.002 m³/s) Sept. 15, 1976.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 157 ft³/s (4.45 m³/s) Jan. 24, gage height, 3.17 ft (0.966 m); minimum daily, 0.67 ft³/s (0.019 m³/s) Nov. 3, 8, 9, 10, 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.90	1.0	1.9	8.1	4.8	8.8	3.5	3.8	3.6	2.3	1.3	1.4
2	.80	.75	1.6	25	4.3	8.1	5.0	3.5	3.3	2.3	1.4	1.4
3	.70	.67	1.5	8.8	3.8	5.9	4.8	3.8	15	2.0	2.8	2.3
4	1.6	.75	2.5	3.9	3.6	5.4	4.4	3.9	7.5	2.2	2.0	1.6
5	1.1	.75	2.8	3.2	3.0	6.7	5.2	3.3	5.0	2.0	1.4	1.6
6	1.4	.75	1.7	3.0	3.0	32	3.6	3.0	4.3	1.8	1.3	27
7	1.0	.67	1.6	8.1	3.2	12	3.3	2.9	3.8	1.7	1.1	4.8
8	.93	.67	2.2	43	3.3	8.1	3.5	2.7	3.5	1.6	.93	3.0
9	.93	.67	16	8.8	3.0	6.4	7.5	2.7	3.5	1.6	.84	2.4
10	.93	.67	4.1	5.6	3.0	6.9	6.4	2.4	3.2	1.6	1.4	2.3
11	.93	.75	2.3	4.3	2.9	13	4.1	2.3	15	1.5	1.8	2.1
12	.93	.75	2.0	3.8	2.7	6.1	3.9	2.9	5.9	1.4	8.1	2.0
13	.93	.75	1.9	6.9	2.8	5.6	3.6	3.3	3.9	1.4	3.6	2.0
14	1.3	.75	1.7	10	2.7	6.1	9.5	3.8	3.5	3.0	1.9	3.8
15	1.0	.67	1.7	4.3	2.6	5.0	5.6	2.9	3.2	1.7	1.6	2.5
16	.93	.93	1.6	3.5	2.5	4.3	4.6	2.4	2.9	6.1	1.4	2.0
17	.93	1.7	1.8	3.3	2.3	4.3	4.3	2.1	3.2	3.6	1.1	1.9
18	.93	2.9	1.7	2.9	2.3	4.1	3.9	3.0	3.0	2.2	1.6	1.8
19	1.0	1.3	1.4	2.7	2.3	3.8	3.6	3.5	2.5	1.9	1.7	1.8
20	1.3	1.0	1.5	2.8	2.4	3.8	3.5	3.3	2.3	1.7	1.3	1.7
21	.93	.93	6.4	66	2.7	3.5	3.3	2.5	2.3	1.9	1.3	13
22	.93	.93	2.3	13	2.7	3.3	3.2	2.2	2.8	1.7	1.1	21
23	.84	1.4	1.9	7.2	4.1	3.3	3.0	9.9	3.0	1.5	1.1	5.2
24	.84	2.8	2.0	49	31	10	3.0	22	2.4	1.5	1.6	3.5
25	.84	1.4	6.9	33	49	6.1	3.0	20	2.2	1.4	1.5	3.2
26	.93	1.1	2.7	13	53	4.3	6.7	8.4	2.0	1.5	1.4	2.9
27	1.7	1.1	2.2	12	16	3.8	14	6.1	2.0	1.4	1.1	2.5
28	1.0	1.4	1.8	9.2	11	3.6	6.1	5.2	2.1	1.1	1.0	2.5
29	.84	1.4	1.7	7.2	---	4.3	4.8	5.2	2.4	2.2	3.8	2.7
30	.93	3.3	1.7	6.4	---	3.8	4.1	4.8	2.4	1.8	2.3	4.4
31	1.0	---	2.2	5.6	---	3.6	---	4.4	---	1.5	1.6	---
TOTAL	31.25	34.61	85.3	383.6	230.0	206.0	145.0	152.2	121.7	61.1	56.37	130.3
MEAN	1.01	1.15	2.75	12.4	8.21	6.65	4.83	4.91	4.06	1.97	1.82	4.34
MAX	1.7	3.3	16	66	53	32	14	22	15	6.1	8.1	27
MIN	.70	.67	1.4	2.7	2.3	3.3	3.0	2.1	2.0	1.1	.84	1.4

CAL YR 1978 TOTAL 1420.68 MEAN 3.89 MAX 51 MIN .45
WTR YR 1979 TOTAL 1637.43 MEAN 4.49 MAX 66 MIN .67

01399525 LAMINGTON (BLACK) RIVER TRIBUTARY NO. 2 NEAR POTTERSVILLE, NJ

LOCATION.--Lat 40°41'40", long 74°43'05", Somerset County, Hydrologic Unit 02030105, on right upstream wingwall of bridge on Black River Road, 1.3 mi (2.1 km) south of Pottersville, and 0.3 mi (0.5 km) upstream from mouth.

DRAINAGE AREA.--1.22 mi² (3.60 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1977 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 180 ft (54.9 m), from topographic map.

REMARKS.--Water-discharge records fair except those above 200 ft³/s (5.66 m³/s), which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 773 ft³/s (21.9 m³/s) Sept. 6, 1979, gage height, 4.98 ft (1.518 m); minimum, 0.01 ft³/s (0.0003 m³/s) July 25, 1978, gage height 0.42 ft (0.128 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 200 ft³/s (5.66 m³/s) revised, and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage Height (ft)	Gage Height (m)
Jan. 21	1845	306	8.67	3.27	0.997
Jan. 24	0500	597	16.9	4.48	1.366
Feb. 26	Unknown	400	11.3	3.85	1.173
Mar. 6	Unknown	276	7.82	3.39	1.033
July 16	1900	271	7.67	3.37	1.027
Aug. 3	2030	736	20.8	4.88	1.487
Sept. 6	Unknown	*773	21.9	4.98	1.518

Minimum discharge, 0.05 ft³/s (0.0014 m³/s) July 14, gage height, 0.47 ft (0.143 m)

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.66	.90	1.7	9.5	1.2	8.9	.94	.99	.94	.35	.16	.52
2	.62	.86	1.3	38	1.1	7.3	1.5	.84	.79	.30	.16	.49
3	.55	.86	1.1	5.2	1.0	6.3	2.1	.84	15	.28	3.3	.59
4	.62	.86	3.3	1.9	.89	5.4	2.1	.94	5.8	.30	3.1	9.2
5	.73	.86	4.0	1.4	.84	6.8	3.3	.70	3.0	.35	.89	10
6	.69	.86	1.5	1.3	.78	41	1.3	.59	1.7	.21	.70	18
7	.62	.86	1.1	9.5	.70	9.5	1.1	.52	1.2	.16	.62	.94
8	.62	.82	3.0	46	.68	4.5	1.2	.46	1.0	.11	.59	.52
9	.58	.82	27	3.7	.66	3.3	8.9	.40	.99	.09	.52	.43
10	.62	.77	3.6	2.1	.65	3.3	6.6	.33	.94	.09	.70	.38
11	.62	.77	1.8	1.5	.64	12	2.7	.26	18	.09	.70	.35
12	.62	.77	1.4	1.1	.63	3.3	1.9	.35	3.9	.08	13	.30
13	.66	.73	1.2	6.9	.62	2.7	1.5	.46	1.7	.06	4.7	.28
14	.77	.73	1.1	7.1	.62	3.3	13	.59	1.2	.07	1.1	.46
15	.90	.73	.95	1.8	.61	2.3	4.9	.43	.99	.12	.94	.38
16	.82	.73	.90	1.1	.60	1.3	3.1	.28	.84	18	.84	.29
17	.82	.95	1.4	.95	.59	1.5	2.1	.22	.84	1.2	.79	.24
18	.77	2.5	1.2	.86	.62	1.3	1.6	.43	.99	.46	.94	.26
19	.77	1.0	.95	.77	.66	1.1	1.2	.59	.70	.35	.99	.28
20	.82	.86	.90	.69	.70	1.1	1.0	.70	.52	.26	.75	.28
21	.77	.82	14	100	.80	.99	.94	.46	.46	.26	.70	2.5
22	.69	.82	3.0	6.1	1.1	.94	.89	.38	.52	.35	.70	11
23	.69	1.0	2.1	2.8	3.1	.89	.84	13	.66	.49	.66	.94
24	.66	3.4	4.2	109	20	7.6	.75	21	.38	.43	.84	.59
25	.62	1.4	14	15	40	3.8	.70	20	.24	.24	1.2	.49
26	.66	1.1	2.3	6.0	52	1.7	4.9	5.8	.16	.16	1.5	.43
27	1.7	1.1	1.8	3.9	17	1.2	9.2	3.3	.15	.21	.62	.38
28	1.0	1.3	1.2	3.0	12	1.0	3.1	2.1	.21	.15	.59	.38
29	.95	1.3	.90	2.3	---	1.5	1.9	1.5	.40	.30	.66	.40
30	.86	4.4	.82	1.8	---	1.2	1.2	1.5	.38	.33	.79	.89
31	.90	---	1.3	1.6	---	1.0	---	1.2	---	.21	.59	---
TOTAL	23.38	34.88	105.02	392.87	160.79	148.02	86.46	81.16	64.60	26.06	44.34	62.19
MEAN	.75	1.16	3.39	12.7	5.74	4.77	2.88	2.62	2.15	.84	1.43	2.07
MAX	1.7	4.4	27	109	52	41	13	21	18	18	13	18
MIN	.55	.73	.82	.69	.59	.89	.70	.22	.15	.06	.16	.24

CAL YR 1978 TOTAL 990.92 MEAN 2.71 MAX 88 MIN .02
WTR YR 1979 TOTAL 1229.77 MEAN 3.37 MAX 109 MIN .06

Note.--No gage-height record Sept. 3 - 6.

01399545 LAMINGTON RIVER AT LAMINGTON, NJ

LOCATION.--Lat 40°39'38", long 74°43'46", Somerset County, Hydrologic Unit 02030105, at bridge on State Route 523 in Lamington, 0.4 mi (0.6 km) downstream from Cold Brook, and 3.8 mi (6.1 km) south of Potterstown.

DRAINAGE AREA.--53.6 mi² (138.8 km²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1977 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)
FEB										
22...	1350	--	221	7.6	.0	13.4	4.0	20	240	60
APR										
11...	1330	109	163	9.0	11.0	13.6	1.0	80	5	50
MAY										
30...	1330	136	175	8.1	17.5	9.1	1.0	490	170	53
AUG										
14...	1340	109	163	7.7	19.0	9.8	<1.0	790	920	57

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
FEB									
22...	14	6.0	15	1.3	37	17	22	.1	13
APR									
11...	12	4.8	10	1.2	35	16	15	.1	7.6
MAY									
30...	13	4.9	9.6	.8	37	15	15	.1	12
AUG									
14...	14	5.3	9.3	1.4	42	13	13	.1	13

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHATE, TOTAL (MG/L AS PO4)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
FEB									
22...	129	1.3	.30	.70	1.0	2.3	.12	--	1.7
APR									
11...	99	<1.0	<.10	--	.40	--	.08	<.01	3.4
MAY									
30...	105	<1.0	<.10	--	.40	--	.28	--	6.3
AUG									
14...	107	<1.0	.50	--	--	--	--	--	5.8

01399600 SOUTH BRANCH ROCKAWAY CREEK TRIBUTARY AT LEBANON, NJ

LOCATION.--Lat 40°38'05", long 74°49'58", Hunterdon County, Hydrologic Unit 02030105, at bridge on unnamed road in Lebanon, 0.5 mi (0.8 km) upstream from mouth, and 1.8 mi (2.9 km) west of Potterstown.

DRAINAGE AREA.--1.02 mi^2 (2.64 km^2).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1960-63, 1977 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by the New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)
JAN 25...	1150	2.1	158	7.2	8.0	8.7	2.0	9200	350
MAR 22...	1145	1.1	183	7.4	11.0	11.1	<1.0	20	<2
MAY 21...	1150	1.3	173	7.5	10.0	10.4	--	<20	130
JUL 24...	1145	1.6	173	7.7	13.0	9.7	<1.0	490	540
SEP 25...	1400	--	157	6.8	11.0	11.2	4.0	<20	23

DATE	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
JAN 25...	63	17	5.1	5.9	1.0	39	20	7.9	.0
MAR 22...	69	18	5.9	6.4	.4	45	19	9.1	.0
MAY 21...	69	18	5.8	6.3	.4	43	19	8.2	.0
JUL 24...	69	18	5.9	5.8	.4	49	18	7.9	.1
SEP 25...	72	19	6.0	6.6	.4	49	21	8.3	.1

DATE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	PHOSPHATE, TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
JAN 25...	16	100	<1.0	<.10	--	.51	.19	1.2
MAR 22...	16	112	<1.0	<.10	--	.80	.02	2.5
MAY 21...	15	119	<1.0	<.10	--	.40	.02	1.9
JUL 24...	15	117	--	--	--	.80	.02	2.3
SEP 25...	17	109	<1.0	.50	.90	1.4	.14	1.0

01399690 SOUTH BRANCH ROCKAWAY CREEK AT WHITEHOUSE, NJ

LOCATION.--Lat 40°37'24", long 74°46'01", Hunterdon County, Hydrologic Unit 02030105, on right upstream wingwall of bridge on U.S. Route 22, 0.6 mi (1.0 km) north of Whitehouse Station, 0.9 mi (1.5 km) west of Whitehouse, and 0.3 mi (0.5 km) upstream from mouth.

DRAINAGE AREA.--13.2 mi² (34.2 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1964-67. March 1977 to current year.

GAGE.--Water-stage recorder. Datum of gage is 113.55 ft (34.61 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records fair. Flow regulated by Round Valley Reservoir.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1480 ft³/s (41.9 m³/s) Jan. 24, gage height, 12.82 ft (3.908 m); minimum, 5.4 ft³/s (0.152 m³/s) Oct. 24.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1480 ft³/s (41.9 m³/s) Jan. 24, 1979, gage height, 12.69 ft (3.908 m); minimum, 2.8 ft³/s (0.11 m³/s) Sept. 15, 16, 1977.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.4	6.5	12	37	29	40	18	17	18	13	9.2	8.6
2	7.7	6.5	9.9	184	28	38	22	16	17	12	9.0	8.2
3	7.1	6.2	9.1	64	26	32	25	15	31	11	14	9.6
4	8.4	6.2	20	30	24	29	25	14	29	12	22	13
5	8.4	6.5	24	26	22	37	34	13	22	12	11	25
6	9.1	6.2	13	18	20	216	22	13	20	9.9	9.4	210
7	7.4	6.2	11	22	19	82	20	12	18	9.5	8.6	30
8	6.8	6.2	16	310	17	44	18	13	17	9.1	7.1	24
9	6.8	5.9	150	44	16	35	38	12	17	9.1	7.4	17
10	6.8	5.9	41	28	15	33	45	11	16	9.1	8.1	15
11	6.8	5.9	18	22	14	79	24	11	132	9.5	8.8	14
12	6.8	5.9	15	19	13	34	22	13	45	9.1	66	13
13	6.8	5.9	14	26	13	29	20	15	26	8.8	25	12
14	8.1	5.9	13	47	11	31	79	16	22	8.8	15	17
15	8.1	5.9	11	19	10	26	40	13	20	9.5	12	23
16	6.8	5.9	11	16	9.5	22	28	11	18	29	11	15
17	7.1	8.8	13	15	8.0	22	25	10	18	41	10	12
18	6.5	17	10	14	8.4	21	22	13	18	22	11	18
19	7.1	8.1	9.5	13	8.0	20	20	16	16	15	14	24
20	7.1	6.8	9.1	13	10	20	18	16	15	11	10	48
21	6.8	6.5	51	506	20	18	18	13	15	10	9.0	51
22	6.5	6.5	17	78	23	18	17	12	15	10	8.8	202
23	6.8	7.7	13	30	29	17	17	54	16	9.5	9.0	31
24	6.2	17	15	351	207	39	16	192	13	11	11	40
25	6.2	8.8	87	228	316	33	15	138	13	11	11	52
26	7.7	7.1	20	68	376	22	30	50	12	9.1	10	51
27	14	7.4	16	55	89	20	52	30	11	9.9	9.0	50
28	7.4	8.8	14	45	51	18	33	25	13	8.4	8.4	34
29	6.8	9.5	13	40	---	20	23	22	16	16	11	15
30	6.5	25	10	35	---	19	19	23	13	30	20	38
31	6.5	---	12	32	---	18	---	22	---	10	10	---
TOTAL	229.5	242.7	697.6	2435	1431.9	1132	805	851	672	405.3	405.8	1120.4
MEAN	7.40	8.09	22.5	78.5	51.1	36.5	26.8	27.5	22.4	13.1	13.1	37.3
MAX	14	25	150	506	376	216	79	192	132	41	66	210
MIN	6.2	5.9	9.1	13	8.0	17	15	10	11	8.4	7.1	8.2
CFSM	.56	.61	1.71	5.95	3.87	2.77	2.03	2.08	1.70	.99	.99	2.83
IN.	.65	.68	1.97	6.86	4.04	3.19	2.27	2.40	1.89	1.14	1.14	3.16

CAL YR 1978 TOTAL 8673.2 MEAN 23.8 MAX 600 MIN 3.9 CFSM 1.80 IN 24.44
WTR YR 1979 TOTAL 10428.2 MEAN 28.6 MAX 506 MIN 5.9 CFSM 2.17 IN 29.39

01399700 ROCKAWAY CREEK AT WHITEHOUSE, NJ

LOCATION.--Lat 40°37'49", long 74°44'11", Hunterdon County, Hydrologic Unit 02030105, on right bank at bridge on Lamington Road, 1.4 mi (2.3 km) northeast of Whitehouse, and 1.8 mi (2.9 km) upstream from mouth.

DRAINAGE AREA.--37.1 mi² (96.1 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1959-62, 1964-65, 1973. April 1977 to current year.

GAGE.--Water-stage recorder. Datum of gage is 99.64 ft (30.370 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records fair. Flow regulated by Round Valley Reservoir.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,510 ft³/s (99.4 m³/s) Jan. 24, 1979, gage height, 9.55 ft (2.911 m); minimum, 7.6 ft³/s (0.22 m³/s) Sept. 12, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 800 ft³/s (22.7 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage Height (ft)	Gage Height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage Height (ft)	Gage Height (m)
Jan. 2	2000	933	26.4	4.80	1.463	May 24	0030	1060	30.0	4.96	1.512
Jan. 8	0630	1540	43.6	6.02	1.835	June 11	1630	1310	37.1	5.47	1.667
Jan. 21	1000	2310	65.4	7.44	2.268	July 16	2345	814	23.1	4.44	1.353
Jan. 24	2400	*3510	99.4	9.55	2.911	Sept. 6	1145	1710	48.4	6.29	1.917
Feb. 26	0300	1600	45.3	6.15	1.875	Sept. 22	0345	1560	44.2	6.00	1.829
Mar. 6	1315	1080	30.6	4.99	1.521						

Minimum discharge, 11 ft³/s (0.31 m³/s) Oct. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	16	43	144	70	124	52	78	62	39	25	20
2	12	16	32	543	60	112	59	70	57	37	24	19
3	12	15	28	223	54	100	77	67	171	35	39	25
4	13	15	69	153	50	91	76	66	118	33	60	29
5	16	16	89	116	48	128	102	64	78	37	27	32
6	16	15	43	63	45	681	73	62	69	30	25	594
7	14	15	34	77	43	265	60	57	60	28	24	84
8	12	15	50	900	44	155	55	46	56	27	20	50
9	12	15	429	179	39	118	77	44	54	26	20	40
10	12	15	137	148	38	108	160	43	52	26	24	36
11	12	15	57	120	36	257	87	41	393	25	32	33
12	13	15	45	158	35	114	72	46	148	24	174	30
13	13	15	41	139	32	93	67	55	84	24	128	28
14	15	15	37	199	24	96	139	62	69	23	38	37
15	18	15	32	93	26	85	186	51	60	26	32	55
16	14	15	31	89	23	67	118	41	56	100	28	29
17	14	22	38	73	20	68	100	37	57	148	24	27
18	14	62	32	59	20	64	93	44	57	54	27	36
19	15	26	39	93	19	60	84	56	49	40	36	56
20	17	19	30	91	29	56	77	55	44	29	26	64
21	17	17	179	1440	43	54	72	43	42	32	23	112
22	16	16	57	307	59	51	67	41	43	30	22	606
23	16	18	41	122	114	52	64	174	50	26	21	94
24	15	59	48	725	524	87	62	586	41	29	28	78
25	15	28	260	929	836	135	60	447	38	27	27	89
26	17	21	69	257	1140	72	60	176	35	24	28	84
27	43	24	52	209	400	57	225	112	34	26	21	78
28	20	26	102	162	162	52	131	93	38	22	20	64
29	17	28	80	128	---	57	104	82	50	39	24	42
30	16	94	64	106	---	56	89	85	41	49	51	98
31	16	---	43	87	---	55	---	75	---	28	25	---
TOTAL	485	703	2331	8132	4033	3570	2748	2999	2206	1143	1123	2669
MEAN	15.6	23.4	75.2	262	144	115	91.6	96.7	73.5	36.9	36.2	89.0
MAX	43	94	429	1440	1140	681	225	586	393	148	174	606
MIN	12	15	28	59	19	51	52	37	34	22	20	19
CFSM	.42	.63	2.03	7.06	3.88	3.10	2.47	2.61	1.98	1.00	.98	2.40
IN.	.49	.70	2.34	8.15	4.04	3.58	2.76	3.01	2.21	1.15	1.13	2.68

CAL YR 1978 TOTAL 25043 MEAN 68.6 MAX 1120 MIN 12 CFSM 1.85 IN 25.11
WTR YR 1979 TOTAL 32142 MEAN 88.1 MAX 1440 MIN 12 CFSM 2.38 IN 32.23

01399700 ROCKAWAY CREEK AT WHITEHOUSE, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1977 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1977 to September 1978 (discontinued).
WATER TEMPERATURES: April 1977 to September 1978 (discontinued).
SEDIMENT ANALYSES: October 1976 to September 1978.

COOPERATION.--Selected field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

EXTREMES FOR PERIOD OF RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 425 micromhos July 9, 1977; minimum, 53 micromhos Mar. 15, 1978.
WATER TEMPERATURES: Maximum, 32.5°C July 18, 1977; minimum, 0.0°C on many days during winter months.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)
JAN 25...	0950	602	83	7.1	2.0	--	3.0	5400	>2400	28
MAR 22...	1015	51	175	7.8	8.0	11.8	<1.0	490	130	61
MAY 21...	1000	44	189	7.8	15.0	8.3	--	700	350	73
JUL 24...	1000	32	200	8.0	23.0	8.2	4.0	1700	920	79
SEP 25...	1100	89	153	7.3	15.0	10.7	1.0	230	79	60

DATE	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
JAN 25...	6.8	2.6	3.6	1.8	12	--	13	5.4	.0
MAR 22...	15	5.8	6.2	1.1	43	--	20	8.1	.0
MAY 21...	18	6.8	7.5	1.3	48	.0	20	8.8	.1
JUL 24...	19	7.7	6.9	1.6	68	--	19	8.5	.1
SEP 25...	15	5.5	6.1	1.6	36	.0	20	8.3	.1

DATE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHATE, TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
JAN 25...	6.7	50	<1.0	.33	.87	1.2	--	.70	6.3
MAR 22...	14	108	1.2	<.10	--	2.2	3.4	.04	1.8
MAY 21...	15	122	<1.0	<.10	--	1.0	--	.07	2.8
JUL 24...	15	138	1.5	<.10	--	1.3	2.8	.10	5.5
SEP 25...	9.5	97	<1.0	.50	1.0	1.5	--	.08	4.7

01399700 ROCKAWAY CREEK AT WHITEHOUSE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	ALUMINUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
MAY 21...	1000	10	1	0	30	1	10	2
SEP 25...	1100	30	3	0	10	0	10	4

DATE	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	PHENOLS (UG/L)
MAY 21...	390	21	80	<.5	11	0	0	0
SEP 25...	300	4	30	<.5	[illegible]	0	30	0

01399780 LAMINGTON (BLACK) RIVER AT BURNT MILLS, NJ

LOCATION.--Lat 40°38'04", long 74°41'13", Somerset County, Hydrologic Unit 02030105, at bridge on Burnt Mills Road in Burnt Mills, 1,400 ft (427 m) upstream from mouth, and 2.4 mi (3.9 km) southwest of Greater Cross Roads.

DRAINAGE AREA.--100 mi^2 (259 km^2).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1964, 1976 to current year.

COOPERATION.--Selected field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)
MAR 01...	1045	450	124	7.6	2.0	13.4	2.0	260	49
APR 25...	1410	146	194	8.8	17.5	12.6	1.0	20	170
MAY 31...	0950	265	185	6.8	17.0	9.6	1.0	E790	E240

DATE	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
MAR 01...	38	9.4	3.5	9.9	1.4	24	--	14	14
APR 25...	63	15	6.2	9.6	1.2	43	--	19	13
MAY 31...	57	14	5.4	8.9	1.5	39	.0	17	12

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHATE, TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
MAR 01...	.0	8.8	88	<1.0	<.10	.80	.13	2.9
APR 25...	.1	7.8	111	<1.0	<.10	.80	.04	4.0
MAY 31...	.1	13	108	<1.0	<.10	.80	.16	4.6

DATE	TIME	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	BORON, TOTAL RECOV-ERABLE (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)
MAY 31...	0950	110	2	0	10	0	20	2

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	PHENOLS (UG/L)
MAY 31...	600	3	50	<.5	10	0	20	0

01399830 NORTH BRANCH RARITAN RIVER AT NORTH BRANCH, NJ

LOCATION.--Lat 40°36'00", long 74°40'27", Somerset County, Hydrologic Unit 02030105, on right bank 5 ft (1.5 m) upstream from bridge on State Highway 28 in North Branch, 0.1 mi (0.16 km) south of River Brook, and 3.6 mi (5.8 km) upstream from confluence with South Branch Raritan River.

DRAINAGE AREA.--174 mi² (451 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1977 to current year.

GAGE.--Water-stage recorder. Datum of gage is 56.94 ft (17.356 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records fair. Some regulation by Round Valley Reservoir.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,100 ft³/s (399 m³/s) Jan. 25, 1979, gage height, 16.62 ft (5.065 m); minimum, 27 ft³/s (0.765 m³/s) Sept. 12, 1977, gage height, 2.77 ft (0.844 m).

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Aug. 28, 1971, reached an elevation of 75.6 ft (23.04 m), from high-water mark.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 5,000 ft³/s (142 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage Height (ft)	Gage Height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage Height (ft)	Gage Height (m)
Jan. 8	1030	6500	184	11.70	3.566	Mar. 6	1745	5140	146	10.70	3.261
Jan. 21	1445	8010	227	12.83	3.911	Sept. 6	1600	5760	163	11.18	3.408
Jan. 25	0315	*14100	399	16.62	5.065	Sept. 22	0645	5440	154	10.95	3.338
Feb. 26	1030	8380	237	13.09	3.990						

Minimum daily discharge, 54 ft³/s (1.53 m³/s) Nov. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	64	62	164	562	467	780	284	337	291	144	92	105
2	66	60	121	2130	405	730	315	305	264	149	89	95
3	58	58	105	1550	386	625	366	287	571	135	95	144
4	62	60	215	513	351	530	363	315	518	130	602	145
5	85	60	333	417	340	600	475	277	363	141	161	124
6	80	58	182	340	337	3280	351	254	315	121	127	2590
7	71	58	138	355	330	2010	274	244	267	108	128	1010
8	64	58	158	4230	320	940	264	241	244	102	116	386
9	62	56	1610	1380	294	700	467	234	228	97	100	330
10	60	56	812	676	280	610	802	228	222	92	92	287
11	60	54	298	531	260	1150	401	191	1190	90	121	244
12	60	56	238	421	220	640	348	197	1030	89	488	206
13	60	56	215	471	200	550	326	228	344	85	671	197
14	62	54	197	940	185	560	832	244	284	82	203	203
15	77	56	170	446	200	480	752	244	260	141	176	305
16	66	56	155	355	185	410	467	197	244	231	155	188
17	62	60	173	298	155	390	405	191	222	562	132	161
18	62	206	149	312	165	375	363	197	225	238	127	152
19	62	118	124	234	175	340	322	244	197	215	167	170
20	64	85	155	319	220	330	298	291	188	155	127	173
21	66	77	634	5430	335	310	281	206	179	144	105	272
22	62	73	298	2290	390	305	267	194	173	141	97	3010
23	60	68	209	893	450	294	257	393	220	121	92	700
24	58	218	212	3490	2610	450	247	2350	170	122	105	379
25	56	127	1060	6760	4410	690	244	2230	158	108	127	353
26	60	95	370	1780	5200	401	267	1230	141	95	121	319
27	132	85	251	1410	1490	340	1050	611	138	108	102	286
28	87	97	200	1030	888	312	620	471	139	92	89	256
29	68	95	188	782	---	333	475	413	179	105	87	221
30	64	267	188	634	---	315	382	405	158	188	260	436
31	62	---	173	553	---	291	---	348	---	110	141	---
TOTAL	2082	2589	9495	41532	21248	20071	12565	13797	9122	4441	5295	13447
MEAN	67.2	86.3	306	1340	759	647	419	445	304	143	171	448
MAX	132	267	1610	6760	5200	3280	1050	2350	1190	562	671	3010
MIN	56	54	105	234	155	291	244	191	138	82	87	95
CFSM	.39	.50	1.76	7.70	4.36	3.72	2.41	2.56	1.75	.82	.98	2.58
IN.	.45	.55	2.03	8.88	4.54	4.29	2.69	2.95	1.95	.95	1.13	2.87

CAL YR 1978 TOTAL 119790 MEAN 328 MAX 5200 MIN 54 CFSM 1.89 IN 25.61
WTR YR 1979 TOTAL 155684 MEAN 427 MAX 6760 MIN 54 CFSM 2.45 IN 33.28

NOTE.--No gage-height record from Feb. 6 to Mar. 22.

01400000 NORTH BRANCH RARITAN RIVER NEAR RARITAN, NJ

LOCATION.--Lat 40°34'10", long 74°40'45", Somerset County, Hydrologic Unit 02030105, on right bank, 400 ft (120 m) upstream from U.S. Highway 202, 1.4 mi (2.3 km) upstream from confluence with South Branch, and 2.7 mi (4.3 km) west of Raritan.

DRAINAGE AREA.--190 mi^2 (492 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1923 to current year. Monthly discharge only for June 1923, published in WSP 1302. Prior to October 1943, published as "at Milltown".

REVISED RECORDS.--WSP 1552: 1924-26, 1928-35.

GAGE.--Water-stage recorder. Concrete control since Sept. 1, 1936. Datum of gage is 50.43 ft (15.371 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 17, 1936, nonrecording gage at site 30 ft (9.1 m) downstream at same datum.

REMARKS.--Water-discharge records good. Some regulation by Round Valley Reservoir.

AVERAGE DISCHARGE.--56 years, 304 ft^3/s (8.609 m^3/s), 21.73 in/yr (552 mm/yr) unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 28,600 ft^3/s (810 m^3/s)revised, Aug. 28, 1971, (gage height, 15.47 ft or 4.715 m, from high-water mark in gage house) from rating curve extended above 15,000 ft^3/s (420 m^3/s); minimum observed, about 3 ft^3/s (0.08 m^3/s) Nov. 28, 1930, gage height, 1.72 ft (0.524 m), result of freezeup; minimum daily, 7.5 ft^3/s (0.21 m^3/s) Sept. 26, 27, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 5,000 ft^3/s (142 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage Height (ft)	Gage Height (m)
Jan. 8	1215	7030	199	8.76	2.670
Jan. 21	1630	9660	274	9.94	3.030
Jan. 25	0215	*15100	428	11.87	3.618
Feb. 26	1215	9780	277	9.99	3.045
Mar. 6	1830	5160	146	7.74	2.359
Sept. 22	0730	5520	156	7.98	2.432

Minimum discharge, 57 ft^3/s (1.614 m^3/s) Oct. 25, Nov. 13, gage height, 2.49 ft (0.759 m).

REVISIONS.--Some peak discharges and the annual maximum (*) for water years 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978 have been revised as shown in the following table. They supersede figures published in State reports for those years.

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage Height (ft)	Gage Height (m)
Feb. 13, 1971	2045	6360	180	8.43	2.569
Apr. 7, 1971	1100	6110	173	8.30	2.530
Aug. 28, 1971	Unknown	*28600	810	15.47	4.715
Sept. 13, 1971	Unknown	7270	206	8.88	2.706
June 1, 1972	0430	9370	265	9.82	2.993
June 22, 1972	2330	*10400	295	10.22	3.115
July 13, 1972	1930	7270	206	8.88	2.706
Nov. 9, 1972	0030	9160	259	9.73	2.966
Nov. 14, 1972	1930	5980	169	8.23	2.508
Feb. 2, 1973	2330	8860	251	9.60	2.926
June 30, 1973	0945	9490	269	9.87	3.008
Aug. 2, 1973	1645	*10900	309	10.44	3.182
Oct. 30, 1973	1445	5770	163	8.12	2.475
Dec. 21, 1973	0545	*10900	309	10.42	3.176
Mar. 20, 1975	0315	9130	259	9.72	2.963
July 13, 1975	1730	9270	263	9.78	2.981
July 21, 1975	0700	*10900	309	10.44	3.182
Sept. 25, 1975	0300	8900	252	9.62	2.932
Jan. 28, 1976	0015	*6020	171	8.25	2.515
Feb. 25, 1977	0700	7810	221	9.13	2.783
Mar. 22, 1977	2300	*9730	276	9.97	3.039
Apr. 5, 1977	0945	6210	196	8.35	2.545
Dec. 21, 1977	1645	6150	174	8.32	2.536
Jan. 9, 1978	1045	7050	200	8.77	2.673
Jan. 26, 1978	1430	*9730	276	9.97	3.039

01400000 NORTH BRANCH RARITAN RIVER NEAR RARITAN, NJ--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	68	66	185	569	494	814	305	343	343	156	100	113
2	70	64	130	2100	430	754	337	311	311	161	100	106
3	62	62	113	1390	390	649	392	299	631	143	103	161
4	66	64	235	543	360	551	385	330	569	130	640	156
5	84	62	378	494	350	621	502	286	415	151	170	130
6	79	62	209	378	345	3310	357	263	371	127	134	2060
7	73	62	151	385	340	1720	305	246	317	116	134	695
8	66	62	170	4330	330	967	292	235	292	110	123	400
9	64	61	1790	1060	310	734	518	225	275	106	110	350
10	64	61	856	715	300	649	856	214	263	100	100	305
11	64	59	337	621	270	1240	430	204	1250	100	130	263
12	62	59	269	485	230	677	378	204	814	98	485	219
13	62	59	241	494	210	569	350	246	400	95	754	175
14	64	59	214	1020	190	577	978	269	337	91	235	199
15	77	59	180	526	205	502	734	263	305	151	189	317
16	70	59	161	461	190	422	485	209	275	241	165	199
17	66	66	185	357	160	400	422	185	252	612	143	170
18	64	225	156	407	170	385	378	194	257	241	134	161
19	64	127	123	330	180	350	337	275	219	230	180	180
20	68	91	127	400	230	337	317	324	194	165	134	185
21	68	81	794	6110	343	317	292	235	185	156	116	263
22	64	79	324	2270	400	311	280	214	180	151	106	2820
23	64	75	225	824	461	292	269	510	225	127	100	569
24	61	241	214	2560	2060	510	257	2410	180	127	113	400
25	59	138	1240	9110	4590	715	252	2190	165	116	134	378
26	62	98	415	1680	5660	415	275	932	151	103	151	343
27	127	93	286	1260	1550	364	1120	640	147	116	110	311
28	88	103	235	990	967	330	577	526	147	100	98	280
29	73	103	214	784	---	357	469	477	189	113	95	241
30	68	299	199	658	---	337	385	469	165	204	280	477
31	68	---	185	577	---	311	---	407	---	120	151	---
TOTAL	2159	2799	10541	43888	21715	20487	13234	14135	9824	4757	5717	12626
MEAN	69.6	93.3	340	1416	776	661	441	456	327	153	184	421
MAX	127	299	1790	9110	5660	3310	1120	2410	1250	612	754	2820
MIN	59	59	113	330	160	292	252	185	147	91	95	106
CFSM	.37	.49	1.79	7.45	4.08	3.48	2.32	2.40	1.72	.81	.97	2.22
IN.	.42	.55	2.06	8.59	4.25	4.01	2.59	2.77	1.92	.93	1.12	2.47

CAL YR 1978 TOTAL 130778 MEAN 358 MAX 6030 MIN 59 CFSM 1.88 IN 25.60
WTR YR 1979 TOTAL 161882 MEAN 444 MAX 9110 MIN 59 CFSM 2.34 IN 31.69

01400120 RARITAN RIVER AT RARITAN, NJ

LOCATION.--Lat 40°33'52", long 74°38'10", Somerset County, Hydrologic Unit 02030105, at bridge on South Branch-Raritan Road in Raritan, 1.7 mi (2.7 km) upstream from Peters Brook, 3.5 mi (5.6 km) northeast of South Branch, and 3.6 mi (5.8 km) southeast of North Branch.

DRAINAGE AREA.--474 mi^2 (1,228 km^2).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1977 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)
FEB 28...	1245	3150	139	6.3	2.0	13.9	2.2	180	350	40
APR 19...	1230	751	185	7.5	10.5	11.8	.9	13	8	61
MAY 31...	1030	1190	180	7.2	17.5	9.3	.9	1700	230	61
JUL 19...	1115	728	155	7.0	22.0	7.9	3.8	>24000	16000	52
AUG 02...	1245	150	245	7.7	27.5	8.5	2.1	790	130	84

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
FEB 28...	9.9	3.7	8.9	1.6	24	0	20	17	16	.1
APR 19...	15	5.8	9.2	1.3	44	0	36	22	13	.1
MAY 31...	15	5.8	8.6	1.0	46	0	38	21	12	.1
JUL 19...	13	4.7	7.0	2.8	37	0	30	18	11	.1
AUG 02...	21	7.6	12	2.1	70	0	57	26	16	.1

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHATE, TOTAL (MG/L AS PO4)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
FEB 28...	8.1	85	1.2	.12	1.2	1.3	2.5	.23	.20	3.7
APR 19...	8.5	108	1.4	<.10	--	.50	1.9	.09	.09	--
MAY 31...	12	107	1.6	<.10	--	.70	2.3	.59	.16	4.5
JUL 19...	8.5	106	1.5	<.10	--	5.0	6.5	1.5	.82	6.6
AUG 02...	9.8	169	1.4	<.10	--	1.9	3.3	.36	.24	8.9

01400300 PETERS BROOK NEAR RARITAN, NJ

LOCATION.--Lat 40°35'35", long 74°40'00", Somerset County, Hydrologic Unit 02030105, on left bank 12 ft (3.7 m) upstream from bridge on Garretson Road, 1.5 mi (2.4 km) north of Raritan, and 2.5 mi (4.0 km) from mouth.

DRAINAGE AREA.--4.19 mi² (10.85 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1978 to current year.

GAGE.--Water-stage recorder. Datum of gage is 68.713 ft (20.944 m) National Geodetic Vertical Datum of 1929 (levels by Somerset County).

REMARKS.--Water-discharge records good except those for period of no gage-height record, which are fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 753 ft³/s (21.3 m³/s) Jan. 24, 1979, gage height, 6.65 ft (2.207 m), from maximum indicator; no flow part or all of some days in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 500 ft³/s (14.2 m³/s) and maximum(*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage Height (ft)	Gage Height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage Height (ft)	Gage Height (m)
Jan. 21	Unknown	600	17.0	Unknown		May 24	1915	506	14.3	5.44	1.658
Jan. 24	Unknown	*753	21.3	a6.65	2.027	Sept. 21	2240	528	15.0	5.55	1.692
Feb. 26	0420	594	16.8	5.89	1.795						

a From maximum indicator

No flow part or all of many days during the year.

REVISIONS.--The maximum discharge for the period May to September 1978 has been revised to 676 ft³/s (19.1 m³/s) superseding the figure published in the report for 1978.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.19	.00	.22	9.5	1.2	4.5	1.0	1.2	1.6	.79	.45	.22
2	.22	.00	.00	128	.96	4.9	1.8	.87	1.2	1.6	5.4	.22
3	.22	.00	.00	17	.79	4.1	2.7	.87	5.6	.87	8.7	.30
4	.96	.00	4.1	8.2	.72	3.5	3.0	1.3	6.7	.96	2.2	.26
5	.57	.00	7.4	6.4	.57	5.4	5.6	.87	8.7	.87	.87	.26
6	1.0	.00	.45	6.2	.40	120	1.8	.87	3.7	.51	.57	38
7	.45	.00	.19	30	.45	15	1.1	.64	1.7	.40	.45	2.2
8	.35	.00	7.4	186	.51	4.9	.96	.45	1.2	.26	.40	.96
9	.35	.00	103	10	.45	3.0	18	.45	1.0	.22	.24	.72
10	.30	.07	5.4	6.2	.40	2.9	13	.26	.96	.20	2.1	.57
11	.35	.19	.87	3.6	.35	23	2.2	.22	53	.19	3.2	.45
12	.30	.40	.45	3.1	.26	3.2	1.7	.79	5.9	.15	50	.51
13	.30	.26	.35	6.9	.35	2.2	1.3	.87	2.0	.19	11	.52
14	.72	.15	.26	11	.35	2.7	30	2.0	1.3	.19	1.7	4.5
15	.51	.00	.19	4.6	.35	1.8	5.4	.87	1.1	.19	.96	1.7
16	.40	.07	.15	3.1	.35	1.1	2.5	.45	.96	18	.57	.57
17	.40	.19	.72	2.3	.30	1.0	2.0	.35	.96	3.5	.45	.51
18	.45	4.5	.26	2.1	.22	.96	1.5	1.6	.96	9.5	2.1	.45
19	.45	.00	.22	2.2	.22	.79	1.2	2.5	.64	2.0	1.8	.40
20	.51	.00	.22	5.2	.26	.79	1.0	1.8	.57	.72	.57	.40
21	.57	.00	21	339	.30	.64	.87	.79	.57	.51	.45	40
22	.57	.19	1.2	20	5.4	.57	.87	.51	.79	.45	.40	87
23	.51	.72	.51	6.2	7.4	.57	.79	20	1.2	.35	.35	3.2
24	.45	2.7	12	400	143	7.7	.64	123	.96	2.2	2.5	1.6
25	.45	.04	34	41	113	4.1	.72	81	.72	.79	.96	1.2
26	2.4	.00	1.5	7.7	99	1.6	2.5	8.0	.51	.40	.40	.96
27	4.5	.00	.72	4.2	14	.96	13	3.0	.35	.30	.40	.87
28	.35	.45	.35	3.0	6.7	.72	2.9	2.1	.64	.26	.26	.79
29	.22	1.1	.26	2.3	---	1.6	1.7	4.3	1.3	9.5	.30	1.3
30	.22	5.9	.19	1.8	---	1.0	1.5	4.5	.72	1.7	.45	13
31	.15	---	.72	1.4	---	1.1	---	3.2	---	.64	.30	---
TOTAL	19.39	16.93	204.30	1278.2	398.26	226.30	123.25	269.63	107.51	58.41	100.50	203.64
MEAN	.63	.56	6.59	41.2	14.2	7.30	4.11	8.70	3.58	1.88	3.24	6.79
MAX	4.5	5.9	103	400	143	120	30	123	53	18	50	87
MIN	.15	.00	.00	1.4	.22	.57	.64	.22	.35	.15	.24	.22

WTR YR 1979 TOTAL 3006.32 MEAN 8.24 MAX 400 MIN .00

NOTE.--No gage-height record Jan. 2 to Feb. 1.

01400500 RARITAN RIVER AT MANVILLE, NJ

LOCATION.--Lat 40°33'18", long 74°35'02", Somerset County, Hydrologic Unit 02030105, on left bank at downstream side of highway bridge at Manville, and 1.4 mi (2.2 km) upstream from Millstone River.

DRAINAGE AREA.--490 mi^2 (1,269 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1903 to March 1907 (published as "at Finderne"), August 1908 to April 1915 (gage heights only, published in WSP 521), August 1921 to current year. Monthly discharge only for some periods, published in WSP 1302.

REVISED RECORDS.--WSP 1552: 1904, 1906, 1922, 1923(M), 1924-25, 1926-29(M), 1930, 1932-33(M), 1924-54. WDR-NJ-75-1: 1964(M), 1969(M), 1970(P), 1972(P), 1973(P).

GAGE.--Water-stage recorder. Datum of gage is 20.61 ft (6.282 m) National Geodetic Vertical Datum of 1929. Prior to Aug. 15, 1923, nonrecording gage on downstream side of highway bridge at same site and datum. From Oct. 1, 1952 to Sept. 30, 1966, water-stage recorder at station at Bound Brook, above Calco Dam (station 01403000) used as auxiliary gage when stage is above 5.0 ft (1.52 m). Since Oct. 1, 1966, water-stage recorder at station at Bound Brook, used as auxiliary gage, was moved downstream to present site (station 01403060). Between June 9, 1978 and June 7, 1979 gage temporarily relocated at site 1.4 mi (2.2 km) downstream, just upstream of Millstone River, because of reconstruction of highway bridge.

REMARKS.--Records poor. Records given herein represent flow at gage only. Slight diurnal fluctuation at low flow. Flow regulated by Spruce Run and Round Valley Reservoirs (see Raritan River Basin, reservoirs in). Diversion to Round Valley Reservoir (see Raritan River Basin, diversions). Water diverted 1,500 ft (457 m) upstream from station and returned to river 0.6 mi (1.0 km) downstream from station by Johns-Manville Corporation (see Raritan River Basin, diversions).

AVERAGE DISCHARGE.--61 years, (1903-06, 1921-79), 761 ft^3/s (21.55 m^3/s), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 36,300 ft^3/s (1,030 m^3/s) Aug. 28, 1971, from rating curve extended above 14,000 ft^3/s (396 m^3/s) on basis of slope-area measurements at gage heights, 14.9 and 20.42 ft (4.54 and 6.224 m), gage height, 23.8 ft (7.25 m), from floodmark (backwater from Millstone River); minimum daily discharge, 17 ft^3/s (0.48 m^3/s) Sept. 19, 1964 (does not include water diverted to Johns-Manville Plant).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 10,000 ft^3/s (283 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	(m^3/s)	Gage Height (ft)	(m)	Date	Time	Discharge (ft^3/s)	(m^3/s)	Gage Height (ft)	(m)
Jan. 22	--	17000	481	Unknown		Mar. 7	--	12000	340	Unknown	
Jan. 25	--	*23000	651	Unknown		May 25	--	11000	312	Unknown	
Feb. 26	--	18000	510	Unknown		Sept. 22	--	10000	283	Unknown	

Minimum daily discharge, 164 ft^3/s (4.64 m^3/s) Oct. 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	205	171	595	1100	1480	2460	913	781	1130	420	334	248
2	213	193	435	3720	1060	2100	936	678	929	440	328	224
3	190	196	371	6320	1020	1890	966	637	1220	376	584	259
4	201	187	585	2210	1000	1640	1000	704	1560	328	1650	295
5	219	191	1200	1390	979	1670	1260	638	1230	346	576	301
6	234	186	842	1150	709	5750	968	553	1030	328	401	4630
7	190	177	566	1010	691	8960	776	510	706	274	407	3610
8	171	169	514	9670	652	3470	684	442	644	253	312	1260
9	164	168	4040	6830	606	2140	858	397	600	238	269	863
10	174	169	4530	2030	578	1760	2140	382	550	264	243	661
11	180	170	1520	1520	560	3150	1310	365	2000	253	364	670
12	193	177	1080	1190	537	2140	1040	363	3060	243	1470	609
13	197	175	808	1240	523	1650	991	449	1310	243	2740	576
14	232	168	659	2360	505	1540	1870	486	946	253	1040	576
15	234	168	473	1440	500	1470	2280	534	773	340	679	773
16	221	166	420	1030	496	1130	1590	425	661	552	536	483
17	182	191	451	853	484	1050	1330	381	609	1960	420	376
18	171	429	384	788	476	1020	1190	353	618	1730	364	334
19	173	371	317	429	401	889	1030	526	536	988	461	340
20	190	249	305	640	447	847	917	1040	440	552	358	334
21	196	213	1400	10200	447	809	800	693	407	440	290	352
22	203	198	1060	14000	400	750	718	526	395	447	269	8500
23	203	193	670	3760	493	807	671	765	468	358	248	2800
24	182	419	584	3300	1200	995	634	7220	427	364	274	1300
25	173	393	3600	20300	3140	2110	614	10600	370	706	382	1080
26	188	283	1560	8900	15300	1320	615	4870	352	312	358	946
27	389	244	900	3710	12600	1180	2120	2250	328	352	279	792
28	258	254	703	2710	4080	1010	1500	1630	334	295	253	773
29	188	267	548	2210	---	1020	1160	1450	609	382	229	652
30	170	687	528	1910	---	1030	936	1780	434	802	476	1430
31	165	---	558	1610	---	923	---	1360	---	407	358	---
TOTAL	6249	7222	32206	119530	51364	58680	33817	43788	24676	15246	16952	36047
MEAN	202	241	1039	3856	1834	1893	1127	1413	823	492	547	1202
MAX	389	687	4530	20300	15300	8960	2280	10600	3060	1960	2740	8500
MIN	164	166	305	429	400	750	614	353	328	238	229	224

CAL YR 1978 TOTAL 332012 MEAN 910 MAX 14300 MIN 164
WTR YR 1979 TOTAL 445777 MEAN 1221 MAX 20300 MIN 164

NOTE.--Doubtful or no gage-height record Oct. 1 to June 6.

01400500 RARITAN RIVER AT MANVILLE, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1923-25, 1959, 1962-73, 1976 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)
FEB 13...	1115	E523	260	7.6	.0	12.8	1.0	14	<20	73
APR 19...	1000	E1030	[illegible]	7.4	11.0	11.6	1.2	23	8	62
JUN 11...	1030	--	213	7.2	21.5	8.1	1.8	330	350	74
JUL 17...	1200	1640	126	6.8	22.5	6.9	4.5	>24000	>24000	40
AUG 02...	1015	269	245	7.5	27.0	6.0	2.4	230	<20	84

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
FEB 13...	18	6.9	11	1.5	54	0	44	23	18	.0
APR 19...	15	5.9	9.8	1.3	44	0	36	23	14	.1
JUN 11...	19	6.4	8.1	1.5	59	0	48	25	16	.1
JUL 17...	10	3.7	5.4	3.1	30	0	25	15	8.9	.1
AUG 02...	21	7.7	12	2.2	67	0	55	27	17	.1

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHATE, TOTAL (MG/L AS PO4)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
FEB 13...	13	135	1.7	.20	2.6	2.8	4.5	.14	.14	1.3
APR 19...	8.5	109	1.4	.20	.30	.50	1.9	.09	.09	--
JUN 11...	11	129	1.0	<.10	--	2.9	3.9	.44	.20	2.3
JUL 17...	6.1	89	1.4	1.8	.20	2.0	3.4	1.4	1.4	15
AUG 02...	10	173	1.4	<.10	--	.90	2.3	.30	.25	5.0

01400560 MILLSTONE RIVER AT APPLEGARTH, NJ

LOCATION.--Lat 40°16'28", long 74°28'22", Middlesex County, Hydrologic Unit 02030105, at bridge on Prospect Plains-Applegarth Road in Applegarth, 2.7 mi (4.3 km) east of Hightstown, and 5.2 mi (8.4 km) upstream from Rocky Brook.

DRAINAGE AREA.--15.0 mi^2 (38.8 km^2).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1960-62, 1964, 1976 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
FEB 22...	0945	158	4.5	.0	14.4	.9	5	240	31	6.8
APR 10...	1000	110	5.1	6.5	12.2	.7	2	110	30	6.9
MAY 30...	1130	103	5.8	15.5	8.0	1.5	920	>2400	30	7.1
JUL 11...	1225	100	5.9	19.5	7.7	1.9	--	--	29	5.9
AUG 06...	1010	106	5.8	22.0	6.9	1.5	350	1600	32	7.3

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
FEB 22...	3.4	13	2.1	0	0	0	--	22	25	.1
APR 10...	3.2	4.7	1.9	2	0	2	--	24	9.5	.1
MAY 30...	3.0	3.5	2.1	5	0	4	.0	22	8.1	.2
JUL 11...	3.4	4.9	2.1	9	0	7	--	15	9.6	.1
AUG 06...	3.4	4.2	2.6	10	0	8	--	18	9.7	.2

DATE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHATE, TOTAL (MG/L AS PO4)	PHOSPHATE, ORTHO, DISSOLVED (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
FEB 22...	8.2	91	1.6	.20	4.7	4.9	6.5	.03	.03	2.2
APR 10...	7.6	71	1.0	<.10	--	.30	1.3	.12	.09	2.0
MAY 30...	8.1	75	1.0	.20	.60	.80	1.8	.67	.39	9.8
JUL 11...	9.2	68	1.2	<.10	--	.80	2.0	.18	.04	8.6
AUG 06...	12	82	<1.0	.20	1.1	1.3	--	.22	.22	14

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
MAY 30...	1130	140	3	0	10	0	30	5

DATE	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	PHENOLS (UG/L)
MAY 30...	3900	4	100	<.5	14	0	50	0

01400650 MILLSTONE RIVER AT GROVERS MILL, NJ

LOCATION.--Lat 40°19'19", long 74°36'31", Mercer County, Hydrologic Unit 02030105, at bridge on Millstone Road in Grovers Mill, 0.3 mi (0.5 km) upstream from Cranbury Brook, and 2.7 mi (4.4 km) north of Duton Neck.

DRAINAGE AREA.--43.4 mi² (112.4 km²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
FEB 22...	1200	293	6.0	1.0	12.2	5.1	49	49	48	11
APR 12...	1030	164	6.3	12.5	9.0	4.8	49	2	40	8.9
JUN 12...	1030	138	6.4	17.5	6.6	4.1	>2400	>2400	37	8.6
JUL 11...	1435	166	6.3	22.5	7.0	3.6	--	--	43	9.4
AUG 06...	1155	112	6.1	25.0	5.2	1.9	220	920	32	7.4

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
FEB 22 ..	5.0	30	3.2	22	0	18	--	26	52	.2
APR 12...	4.4	10	3.0	12	0	10	--	24	17	.2
JUN 12...	3.8	8.4	2.5	20	0	16	.0	17	14	.2
JUL 11...	4.7	11	2.7	21	0	17	--	16	18	.2
AUG 06...	3.2	5.3	3.4	15	0	12	--	17	11	.2

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHATE, TOTAL (MG/L AS PO4)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
FEB 22...	8.4	159	2.7	1.9	.50	2.4	5.1	1.2	.83	8.8
APR 12...	5.5	92	1.6	.80	1.0	1.8	3.4	.43	.42	5.3
JUN 12...	6.3	98	1.3	.50	4.3	4.8	6.1	.64	.59	7.5
JUL 11...	6.4	115	2.8	<.10	--	1.1	3.9	.72	.61	9.6
AUG 06...	7.8	86	<1.0	.20	1.2	1.4	--	.71	.53	11

DATE	TIME	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	BORON, TOTAL RECOV-ERABLE (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COPPER TOTAL RECOV-ERABLE (UG/L AS CU)
JUN 12...	1030	50	6	0	20	0	20	7

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	PHENOLS (UG/L)
JUN 12...	2700	9	120	<.5	9	0	20	0

01401000 STONY BROOK AT PRINCETON, NJ

LOCATION.--Lat 40°19'59", long 74°40'56", Mercer County, Hydrologic Unit 02030105, at bridge on U.S. Highway 206, 1.6 mi (2.6 km) southwest of Princeton, and 4.0 mi (6.4 km) upstream from Carnegie Lake.

DRAINAGE AREA.--44.5 mi^2 (115.3 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1953 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 62.23 ft (18.968 m) National Geodetic Vertical Datum of 1929 (levels from New Jersey Geological Survey bench mark).

REMARKS.--Water-discharge records fair. Since July 1959 some regulation by several small reservoirs, combined capacity, 49,800,000 gal (188,500 m^3).

AVERAGE DISCHARGE.--26 years, 64.7 ft^3/s (1.832 m^3/s), 19.75 in/yr (502 mm/yr), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,960 ft^3/s (254 m^3/s) Aug. 28, 1971 (gage height, 14.26 ft or 4.346 m) from rating curve extended above 4,000 ft^3/s (110 m^3/s) on basis of contracted-opening measurement of peak flow; no flow many days in August and September 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,800 ft^3/s (51.0 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage Height (ft)	Gage Height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage Height (ft)	Gage Height (m)
Dec. 9	1400	2140	60.6	7.18	2.188	Mar. 6	1730	2430	68.8	7.73	2.356
Jan. 8	0700	2070	58.6	7.06	2.152	May 25	0745	2130	60.3	7.16	2.182
Jan. 21	1045	3710	105	9.61	2.929	Aug. 2	2330	2490	70.5	7.86	2.396
Jan. 25	0200	*4410	125	10.44	3.182	Aug. 4	0145	2820	79.9	8.37	2.551
Feb. 25	0300	3690	105	9.58	2.920	Sept. 30	0915	3000	85.0	8.64	2.633

Minimum discharge, 2.8 ft^3/s (0.079 m^3/s) Oct. 26, gage height, 1.46 ft (0.445 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.9	4.0	45	120	40	201	39	39	64	12	20	18
2	5.6	3.7	26	759	30	195	41	32	53	14	343	16
3	6.3	3.5	20	404	28	160	53	29	48	11	399	15
4	7.1	3.7	92	105	25	129	64	30	152	12	573	13
5	8.0	3.7	169	73	22	144	94	27	112	16	86	14
6	12	3.7	73	65	20	1070	62	23	70	12	48	590
7	8.5	3.7	43	80	19	414	42	21	52	9.0	57	134
8	7.1	3.7	43	1340	18	189	35	18	42	6.7	32	60
9	5.6	4.0	1050	222	17	129	80	17	35	5.6	23	41
10	4.9	3.7	364	105	17	103	243	16	31	5.2	19	31
11	4.6	3.7	107	68	16	263	94	13	253	4.9	25	27
12	4.0	3.3	73	47	16	136	68	24	198	4.9	260	22
13	4.0	3.3	61	65	15	94	59	29	72	4.3	296	19
14	4.9	3.5	54	125	15	88	223	34	48	11	80	29
15	4.3	3.7	43	80	15	74	198	45	36	6.3	50	55
16	3.7	4.0	39	52	14	55	107	26	30	20	36	25
17	4.3	4.3	42	39	14	52	78	18	26	19	27	18
18	4.0	22	38	36	14	48	64	18	31	139	25	15
19	4.0	21	29	25	14	42	53	109	23	88	47	13
20	5.3	11	27	31	14	35	44	126	17	23	30	12
21	6.0	9.5	153	2300	15	38	38	62	15	13	22	17
22	5.6	7.5	84	339	45	34	35	44	15	12	19	590
23	5.3	6.3	52	130	70	32	32	117	29	9.5	16	126
24	3.7	18	66	972	943	101	30	1100	16	57	142	62
25	3.0	18	707	1370	2100	174	31	1030	12	96	117	47
26	2.8	12	140	207	1430	78	32	204	10	23	39	39
27	5.6	8.5	88	100	374	53	216	114	9.0	16	26	32
28	5.6	12	57	70	246	44	82	92	8.5	11	32	27
29	6.7	14	47	60	---	45	62	88	17	14	36	29
30	4.9	82	42	50	---	47	47	144	15	126	47	1080
31	4.0	---	40	45	---	42	---	84	---	35	25	---
TOTAL	166.3	305.0	3914	9484	5606	4309	2346	3773	1539.5	836.4	2997	3216
MEAN	5.36	10.2	126	306	200	139	78.2	122	51.3	27.0	96.7	107
MAX	12	82	1050	2300	2100	1070	243	1100	253	139	573	1080
MIN	2.8	3.3	20	25	14	32	30	13	8.5	4.3	16	12
CFSM	.12	.23	2.83	6.88	4.49	3.12	1.76	2.74	1.15	.61	2.17	2.40
IN.	.14	.25	3.27	7.93	4.69	3.60	1.96	3.15	1.29	.70	2.51	2.69

CAL YR 1978 TOTAL 25490.5 MEAN 69.8 MAX 2340 MIN 2.8 CFSM 1.57 IN 21.31
WTR YR 1979 TOTAL 38492.2 MEAN 105 MAX 2300 MIN 2.8 CFSM 2.36 IN 32.18

01401000 STONY BROOK AT PRINCETON, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1956-75, 1978 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1956 to September 1962, October 1963 to September 1964, October 1965 to June 1970.
SUSPENDED-SEDIMENT DISCHARGE: January 1956 to June 1970.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
JAN 31...	0945	E45	167	6.8	2.5	12.5	.7	221	<200	48	11
APR 05...	1300	114	176	7.7	9.5	14.0	1.7	130	8	53	12
JUN 18...	1030	32	197	7.5	21.5	10.7	2.0	240	79	69	16
JUL 23...	1045	9.5	214	7.3	23.5	5.4	1.5	540	700	71	17
AUG 08...	1430	30	173	7.5	26.0	4.2	1.6	210	23	54	13

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
JAN 31...	5.0	9.6	1.8	22	0	18	--	26	15	.1
APR 05...	5.5	10	1.5	33	0	27	--	28	15	.0
JUN 18...	7.1	12	2.3	49	0	40	.0	26	13	.1
JUL 23...	6.9	12	2.6	56	0	46	--	24	15	.2
AUG 08...	5.3	8.7	2.6	39	0	32	--	23	11	.1

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHATE, TOTAL (MG/L AS PO4)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
JAN 31...	13	92	1.5	<.10	--	.39	1.9	.21	.21	2.4
APR 05...	11	106	1.0	<.10	--	.60	1.6	.11	.11	3.7
JUN 18...	11	124	.87	<.10	--	1.1	2.0	.09	.06	5.0
JUL 23...	7.6	133	<1.0	<.10	--	1.2	--	.23	.15	7.0
AUG 08...	12	107	1.2	.10	.50	.60	1.8	.16	.16	7.7

DATE	TIME	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	BORON, TOTAL RECOV-ERABLE (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)
JUN 18...	1030	30	3	0	250	2	20	7

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	PHENOLS (UG/L)
JUN 18...	180	4	20	<.5	24	0	10	1

01401400 HEATHCOTE BROOK AT KINGSTON, NJ

LOCATION.--Lat 40°22'10", long 74°36'59", Middlesex County, Hydrologic Unit 02030105, at bridge on Mapleton Road in Kingston, 0.3 mi (0.4 km) east of Delaware and Raritan Canal at Kingston, 0.7 mi (1.1 km) downstream from Carters Brook, and 3.8 mi (6.1 km) northwest of Scotts Corners.

DRAINAGE AREA.--9.0 mi^2 (23.3 km^2).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
FEB 14...	1215	--	380	6.7	.5	13.6	.5	13	2	140	38
MAR 28...	1030	8.8	205	6.7	7.5	12.6	2.0	110	11	62	16
JUN 13...	1300	7.2	205	6.7	17.0	9.8	1.9	1100	240	67	15
JUL 16...	1120	8.0	245	6.6	20.5	7.6	1.5	3500	540	79	18
AUG 01...	1345	7.6	225	6.3	21.5	5.3	1.5	3500	79	73	17

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
FEB 14...	12	15	2.6	27	0	22	--	120	15	.0
MAR 28...	5.3	10	2.1	24	0	20	--	40	13	.1
JUN 13...	7.2	11	2.2	32	0	26	.0	41	12	.1
JUL 16...	8.2	13	3.2	33	0	27	--	50	14	.1
AUG 01...	7.3	12	2.4	27	0	22	--	42	13	.1

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHATE, TOTAL (MG/L AS PO4)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
FEB 14...	13	265	3.0	1.2	.30	1.5	4.5	.05	.05	1.6
MAR 28...	12	136	1.7	<.10	--	1.1	2.8	.04	.04	4.4
JUN 13...	14	140	1.7	.40	1.0	1.4	3.1	.19	.06	6.3
JUL 16...	12	186	2.4	.20	1.7	1.9	4.3	.03	--	7.9
AUG 01...	12	160	3.1	<.10	--	1.3	4.4	.04	.04	6.7

DATE	TIME	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	BORON, TOTAL RECOV-ERABLE (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)
JUN 13...	1300	60	3	0	30	0	10	5

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	PHENOLS (UG/L)
JUN 13...	1200	8	80	<.5	12	0	30	0

01401440 MILLSTONE RIVER AT KINGSTON, NJ

LOCATION.--Lat 40°22'24", long 74°37'15", Middlesex County, Hydrologic Unit 02030105, at bridge on Lincoln Highway in Kingston, 0.2 mi (0.4 km) downstream from the outflow of Carnegie Lake, and 3.0 mi (4.9 km) northwest of Plainsboro.

DRAINAGE AREA.--172 mi^2 (445 km^2), includes 8.0 mi^2 (20.7 km^2) which drains into Delaware and Raritan Canal.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
FEB 14...	0945	223	6.3	.0	13.6	1.4	>2400	540	54	12
APR 05...	1000	170	6.9	10.5	11.8	3.2	170	8	48	11
JUN 13...	1000	152	6.9	19.0	8.6	3.6	>2400	920	48	11
JUL 16...	1400	134	6.4	25.0	7.4	3.7	230	280	38	8.7
AUG 06...	1355	109	6.4	26.0	4.8	2.8	230	540	30	7.4

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
FEB 14...	5.9	14	3.0	23	0	19	--	28	24	.1
APR 05...	5.1	11	2.6	20	0	16	--	24	17	.1
JUN 13...	5.1	9.1	2.4	29	0	24	.0	19	12	.1
JUL 16...	3.9	7.7	3.0	22	0	18	--	14	14	.2
AUG 06...	2.9	5.3	3.5	15	0	12	--	14	9.7	.2

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHATE, TOTAL (MG/L AS PO4)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
FEB 14...	12	137	3.2	.80	.50	1.3	4.5	1.0	.41	4.5
APR 05...	6.6	98	1.9	.30	.70	1.0	2.9	.38	.21	4.4
JUN 13...	9.2	104	1.3	.20	1.1	1.3	2.6	.69	.07	11
JUL 16...	4.1	90	1.3	.30	1.4	1.7	3.0	.57	.57	6.1
AUG 06...	6.1	77	<1.0	.20	1.5	1.7	--	.35	.30	8.0

DATE	TIME	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	BORON, TOTAL RECOV-ERABLE (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)
JUN 13...	1000	30	5	0	6	0	10	7

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	PHENOLS (UG/L)
JUN 13...	1700	5	110	<.5	11	0	30	0

01401600 BEDEN BROOK NEAR ROCKY HILL, NJ

LOCATION.--Lat 40°24'52", long 74°39'02", Somerset County, Hydrologic Unit 02030105, at bridge on U.S. Route 206 at State Route 533, 0.7 mi (1.1 km) upstream from Pike Run, 1.2 mi (1.9 km) northwest of Rocky Hill, and 4.6 mi (7.4 km) north of Princeton.

DRAINAGE AREA.--27.6 mi^2 (71.5 km^2).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1959-63, 1976 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
JAN 31...	1125	80	157	6.9	3.0	12.2	3.0	33	4	48	11
MAR 27...	1115	58	153	6.9	6.5	13.6	2.0	79	120	48	11
MAY 31...	1400	76	147	7.1	18.5	9.2	1.0	490	130	48	11
JUL 19...	1415	62	155	6.8	23.0	6.0	3.1	9200	5400	51	12
AUG 08...	1215	40	209	7.5	24.0	4.2	1.5	230	170	70	17

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
JAN 31...	4.9	8.1	1.6	22	0	18	--	26	12	.0
MAR 27...	5.0	7.9	1.4	27	0	22	--	25	11	.1
MAY 31...	5.0	7.4	1.4	32	0	26	.0	23	8.5	.1
JUL 19...	5.0	7.5	2.4	27	0	22	--	23	8.3	.1
AUG 08...	6.7	9.4	2.3	51	0	42	--	29	13	.1

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHATE, TOTAL (MG/L AS PO4)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
JAN 31...	13	91	2.3	.30	.63	.93	3.2	--	.14	2.0
MAR 27...	12	100	1.0	<.10	--	.70	1.7	.11	.10	3.0
MAY 31...	14	96	1.5	<.10	--	.80	2.3	--	.17	4.8
JUL 19...	12	112	1.9	<.10	--	1.9	3.8	.39	.39	6.8
AUG 08...	11	129	1.4	.10	.80	.90	2.3	.35	.21	4.0

DATE	TIME	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	BORON, TOTAL RECOV-ERABLE (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)
MAY 31...	1400	80	3	0	20	0	20	4

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	PHENOLS (UG/L)
MAY 31...	360	1	30	<.5	10	0	20	0

01402000 MILLSTONE RIVER AT BLACKWELLS MILLS, NJ

LOCATION.--Lat 40°28'30", long 74°34'34", Somerset County, Hydrologic Unit 02030105, on left bank 30 ft (9 m) downstream from highway bridge at Blackwells Mills, and 0.3 mi (0.5 km) downstream from Six Mile Run.

DRAINAGE AREA.--258 mi² (668 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1903 to December 1904 (gage heights only), August 1921 to current year. Monthly discharge only for some periods, published in WSP 1302. Published as "at Millstone" 1903-04.

REVISED RECORDS.--WSP 1552: 1924-25(M), 1926.

GAGE.--Water-stage recorder. Concrete control since Nov. 18, 1933. Datum of gage is 26.97 ft (8.220 m) National Geodetic Vertical Datum of 1929. June 27, 1903 to Dec. 31, 1904, nonrecording gage at bridge 2.0 mi (3.2 km) downstream at Millstone at different datum. Aug. 4, 1921 to Aug. 16, 1928, nonrecording gage at present site and datum.

REMARKS.--Water-discharge records good except for those above 2,000 ft³/s (56.6 m³/s), which are poor. Inflow from and losses to Delaware and Raritan Canal above station. Flow slightly regulated by Carnegie Lake, capacity, 310,000,000 gal (1,173,000 m³) and several smaller reservoirs, combined capacity, 49,800,000 gal (188,500 m³).

AVERAGE DISCHARGE.--58 years, 378 ft³/s (10.70 m³/s), 19.89 in/yr (505 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 22,200 ft³/s (629 m³/s) Aug. 28, 1971, gage height, 18.68 ft (5.694 m) from high-water mark; minimum, about 5 ft³/s (0.14 m³/s) Sept. 16, 1923.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,000 ft³/s (85.0 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage Height (ft)	Gage Height (m)
Dec. 10	0945	3500	99.1	8.54	2.603
Jan. 8	2315	4510	128	10.02	3.054
Jan. 22	Unknown	*10300	292	a13.84	4.218
Jan. 25	1330	9350	265	13.37	4.075
Feb. 26	Unknown	9000	255	Unknown	
Mar. 7	0830	4440	126	9.93	3.027
May 25	1145	6300	178	11.61	3.539

a - from high-water mark

Minimum discharge, 54 ft³/s (1.53 m³/s) July 14, gage height, 1.51 ft (0.460 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	59	79	288	463	500	1510	246	260	505	141	176	131
2	66	76	224	1340	336	1050	251	224	399	150	168	107
3	89	76	183	2840	311	868	279	207	336	141	839	89
4	101	73	302	1660	292	714	311	203	650	141	1170	76
5	101	73	590	602	255	699	434	191	827	158	771	73
6	101	73	434	463	240	2100	346	176	695	137	399	1570
7	113	73	316	434	220	4070	265	165	505	116	292	2030
8	104	73	269	3120	200	2680	233	154	394	92	180	1360
9	89	76	1620	3690	190	1240	316	150	307	81	119	475
10	76	79	3320	1690	180	690	913	137	265	73	101	292
11	66	76	2210	638	170	1110	562	128	494	66	116	216
12	61	73	776	434	165	1000	416	144	1190	61	528	172
13	61	71	500	405	160	681	331	207	528	61	1250	147
14	64	73	422	667	160	562	681	203	377	224	488	183
15	71	73	410	550	155	494	1060	246	283	405	382	302
16	64	73	356	434	150	410	685	203	229	237	297	203
17	61	81	371	361	148	377	522	168	203	469	203	168
18	64	168	336	302	141	331	410	150	229	733	137	150
19	66	144	302	265	150	302	336	463	265	650	150	125
20	64	119	274	242	158	288	292	827	283	399	137	107
21	66	104	638	3730	168	269	269	505	203	255	113	101
22	66	92	567	7630	200	255	246	382	161	168	104	1690
23	64	84	410	3330	269	242	224	457	176	131	98	1070
24	61	134	377	1920	1800	297	211	3060	165	116	187	457
25	64	128	2290	7770	4000	690	203	5570	144	233	1010	321
26	64	116	2160	4240	7000	451	216	3750	131	147	377	251
27	79	110	856	2000	4000	356	671	1780	119	113	237	203
28	81	128	505	896	2490	292	481	723	107	84	191	180
29	76	154	356	709	---	274	377	626	172	87	183	172
30	76	316	292	602	---	274	311	704	158	279	229	1840
31	79	---	274	614	---	265	---	632	---	251	168	---
TOTAL	2317	3068	22228	54041	24208	24841	12098	22795	10500	6399	10800	14261
MEAN	74.7	102	717	1743	865	801	403	735	350	206	348	475
MAX	113	316	3320	7770	7000	4070	1060	5570	1190	733	1250	2030
MIN	59	71	183	242	141	242	203	128	107	61	98	73
CFSM	.29	.40	2.78	6.76	3.35	3.11	1.56	2.85	1.36	.80	1.35	1.84
IN.	.33	.44	3.20	7.79	3.49	3.58	1.74	3.29	1.51	.92	1.56	2.06

CAL YR 1978 TOTAL 174003 MEAN 477 MAX 8700 MIN 50 CFSM 1.85 IN 25.09
WTR YR 1979 TOTAL 207556 MEAN 569 MAX 7770 MIN 59 CFSM 2.21 IN 29.93

NOTE.--No gage-height record Jan. 21-23.

01402540 MILLSTONE RIVER AT WESTON, NJ

LOCATION.--Lat 40°31'47", long 74°35'19", Somerset County, Hydrologic Unit 02030105, at bridge on Wilhouski Street in Weston, 50 ft (15 m) upstream from Royce Brook, 0.8 mi (1.2 km) southwest of Alma White College, and 1.9 mi (3.0 km) north of Millstone.

DRAINAGE AREA.--271 mi² (702 km²), includes approximately 13 mi² (34 km²) which drains into Delaware and Raritan canal.

WATER-QUALITY RECORD

PERIOD OF RECORD.--Water years 1976 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
FEB 28...	1030	87	5.7	.0	13.2	2.2	920	>2400	22	5.4
APR 12...	1345	180	6.8	11.0	10.8	2.7	50	<20	55	13
JUN 11...	1330	176	6.7	21.5	7.0	3.2	790	540	55	14
JUL 23...	1300	176	6.4	25.0	4.7	2.7	490	170	53	13
AUG 08...	1015	147	6.7	24.5	4.0	2.2	230	540	43	11

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
FEB 28...	2.1	5.5	1.8	7	0	6	--	15	9.2	.1
APR 12...	5.4	11	2.1	27	0	22	--	27	15	.1
JUN 11...	4.9	8.3	2.4	29	0	24	.0	26	14	.1
JUL 23...	5.0	9.0	3.1	30	0	25	--	21	13	.2
AUG 08...	3.8	6.9	3.4	27	0	22	--	19	12	.2

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHATE, TOTAL (MG/L AS PO4)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
FEB 28...	4.7	56	1.0	.26	.76	1.0	2.0	.61	.52	4.7
APR 12...	9.3	105	1.5	.20	.70	.90	2.4	.28	.28	3.8
JUN 11...	10	115	1.7	<.10	--	3.5	5.2	.42	.14	5.0
JUL 23...	8.1	111	1.5	<.10	--	1.4	2.9	.72	.65	11
AUG 08...	7.9	100	1.2	.20	1.9	2.1	3.3	.65	.41	8.1

DATE	TIME	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	BORON, TOTAL RECOV-ERABLE (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)
JUN 11...	1330	40	4	0	20	1	40	6

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	PHENOLS (UG/L)
JUN 11...	940	9	80	<.5	13	0	30	0

01403060 RARITAN RIVER BELOW CALCO DAM, AT BOUND BROOK, NJ

LOCATION.--Lat 40°33'05", long 74°32'54", Somerset County, Hydrologic Unit 02030105, on right bank 1,000 ft (305 m) downstream from Calco Dam and Cuckold Brook, 1.2 mi (1.9 km) downstream from Millstone River, and 1.2 mi (1.9 km) southwest of Bound Brook.

DRAINAGE AREA.--785 mi² (2.033 km²), includes 11 mi² (28 km²) which drains into the Delaware and Raritan Canal.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1903 to March 1909, October 1944 to current year. Monthly discharge only for some periods, published in WSP 1302. Prior to October 1966 published as "Raritan River at Bound Brook" (station 01403000).

REVISED RECORDS.--WSP 1552: 1903-07, 1946(M), 1949, 1952(P).

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Sept. 12, 1903 to Mar. 31, 1909, nonrecording gages at highway bridge, 1.2 mi (1.9 km) downstream at different datum. October 1944 to Sept. 30, 1966, water-stage recorder and concrete control at site 1,120 ft (341 m) upstream at datum 18.05 ft (5.505 m) higher.

REMARKS.--Water-discharge records good. Water diverted 1.9 mi (3.0 km) above station by Elizabethtown Water Co. for municipal supply (see Raritan River Basin, diversions). Flow regulated by Spruce Run and Round Valley Reservoirs (see Raritan River Basin, reservoirs in). Diversions to Round Valley Reservoir (see Raritan River Basin, diversions). Slight diurnal fluctuations at low flow.

AVERAGE DISCHARGE.--40 years, (1903-08, 1944-79), 1,285 ft³/s (36.39 m³/s), adjusted for diversion by Elizabethtown Water Co. since 1944, and change in contents in Spruce Run Reservoir since 1964 and Round Valley Reservoir since 1966.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 46,100 ft³/s (1.310 m³/s) Aug. 28, 1971, elevation, 37.47 ft (11.421 m), from floodmark; minimum daily, 37 ft³/s (1.05 m³/s) Sept. 6, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 12,000 ft³/s (340 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage Height (ft)	Gage Height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage Height (ft)	Gage Height (m)
Jan. 3	--	12000	340	25.03	7.629	Feb. 26	--	29600	838	31.18	9.504
Jan. 8	--	19800	561	27.70	8.443	Mar. 7	0345	17500	496	26.95	8.214
Jan. 22	--	29000	821	30.91	9.421	May 25	1315	18800	532	27.40	8.352
Jan. 25	--	*34600	980	33.18	10.113	Sept. 6	2130	12300	348	25.17	7.672
						Sept. 22	1445	14200	402	25.81	7.867

Minimum discharge, 137 ft³/s (3.88 m³/s) Oct. 18, 24, 25, 30, 31, Nov. 11, elevation, 16.59 ft (5.057 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	173	156	826	1550	2000	4070	1130	1000	1620	506	407	303
2	189	177	588	5270	1380	3220	1160	852	1300	521	435	303
3	187	180	478	9600	1310	2820	1220	791	1560	449	1380	277
4	211	168	829	3950	1270	2380	1290	860	2240	412	2670	303
5	230	172	1790	2000	1210	2410	1690	776	2060	444	1410	299
6	247	166	1240	1600	902	8240	1290	668	1700	407	732	6950
7	211	157	823	1420	862	13700	1000	611	1320	321	623	6520
8	181	148	719	13500	800	6340	868	526	1090	273	425	2630
9	159	150	5900	11000	740	3460	1140	473	901	233	303	1400
10	156	154	8140	3790	700	2490	3130	444	814	250	255	926
11	153	152	3750	2180	670	4430	1880	416	2420	242	384	814
12	162	157	1840	1610	640	3220	1440	430	5240	218	1770	703
13	166	153	1270	1640	620	2370	1300	586	1970	199	4300	617
14	208	147	1030	3130	600	2130	2600	623	1360	308	1600	642
15	217	147	815	2010	590	1980	3430	718	1060	732	1040	1020
16	195	145	704	1440	580	1530	2300	556	860	732	754	611
17	150	180	752	1180	565	1410	1860	473	769	2440	532	454
18	141	526	645	1050	550	1330	1600	425	806	2380	425	393
19	145	439	538	623	477	1160	1350	926	740	1830	511	366
20	162	281	497	829	535	1100	1180	1850	662	918	412	335
21	170	227	2050	14700	545	1040	1030	1150	550	623	326	425
22	178	199	1610	22700	526	961	918	845	497	538	281	10600
23	176	185	1030	7310	696	1010	845	1180	568	412	259	4010
24	150	481	903	5400	1020	1270	791	10800	516	389	326	1860
25	143	447	6090	29800	7300	2870	762	17000	439	829	1350	1350
26	160	315	3750	13800	23500	1780	776	8940	389	393	682	1120
27	393	266	1970	5920	17600	1530	2870	4120	353	380	444	901
28	253	295	1160	3740	6820	1280	2000	2380	357	308	366	837
29	172	336	843	3000	---	1270	1530	2100	682	402	312	754
30	152	954	757	2570	---	1280	1220	2530	521	978	556	2750
31	150	---	772	2250	---	1160	---	2000	---	580	439	---
TOTAL	5740	7660	54109	180562	75008	85241	45600	67049	35364	19647	25709	50473
MEAN	185	255	1745	5825	2679	2750	1520	2163	1179	634	829	1682
MAX	393	954	8140	29800	23500	13700	3430	17000	5240	2440	4300	10600
MIN	141	145	478	623	477	961	762	416	353	199	255	277

CAL YR 1978 TOTAL 515640 MEAN 1413 MAX 20700 MIN 141
WTR YR 1979 TOTAL 652162 MEAN 1787 MAX 29800 MIN 141

01403150 WEST BRANCH MIDDLE BROOK NEAR MARTINSVILLE, NJ

LOCATION.--Lat 40°36'44", long 74°35'28", Somerset County, Hydrologic Unit 02030105, on left bank 150 ft (45.7 m) upstream from bridge on Grim Road, 1.4 mi (2.3 km) northwest of Martinsville, and 1.8 mi (2.9 km) upstream from confluence with East Branch Middle Brook.

DRAINAGE AREA.--1.99 mi² (5.15 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June to September 1979.

GAGE.--Water-stage recorder. Datum of gage is 240.48 ft (73.30 m) National Geodetic Vertical Datum of 1929 (levels by Somerset County).

REMARKS.--Water-discharge records fair.

COOPERATION.--Gage-height record collected in cooperation with Somerset County.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period June to September, 189 ft³/s (5.35 m³s) Sept. 21, gage height, 4.15 ft (1.26 m); minimum, 0.15 ft³/s (0.004 m³/s) July 22, 23, 24, 27, 28, 29, Aug. 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1									---	.44	.21	.19
2									---	.45	.44	.20
3									---	.37	.90	.21
4									---	.39	.42	.21
5									---	.30	.25	.23
6									---	.24	.23	18
7									---	.23	.22	.89
8									---	.22	.21	.47
9									---	.22	.20	.34
10									---	.22	.41	.31
11									---	.22	.69	.30
12									---	.22	9.8	.26
13									---	.21	2.3	.26
14									---	.22	.53	.86
15									---	.21	.37	.48
16									---	3.2	.29	.30
17									---	.80	.25	.26
18									---	1.8	.51	.26
19									---	.50	.46	.26
20									---	.24	.28	.26
21									.49	.21	.25	16
22									.55	.19	.22	28
23									.73	.17	.22	1.5
24								†71.8	.61	.59	.78	.81
25									.59	.24	.33	.65
26									.50	.19	.24	.57
27									.53	.17	.22	.47
28									.69	.15	.21	.44
29									.53	1.8	.22	.66
30									.39	.46	.23	3.7
31									---	.25	.21	--
TOTAL									---	15.12	22.10	77.35
MEAN									---	.49	.71	2.58
MAX									---	3.2	9.8	28
MIN									---	.15	.20	.19
CFSM									---	.25	.36	1.30
IN.									---	.28	.41	1.45

† Result of discharge measurement.

01403400 GREEN BROOK AT SEELEY MILLS, NJ

LOCATION.--Lat 40°39'53", long 74°24'10", Somerset County, Hydrologic Unit 02030105, on right bank 150 ft (45.7 m) downstream from bridge on Diamond Hill Road, 200 ft (61.0 m) downstream from Blue Brook, and 0.5 mi (0.8 km) northwest of Scotch Plains.

DRAINAGE AREA.--6.23 mi² (16.14 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June to September 1979.

GAGE.--Water-stage recorder. Datum of gage is 202.05 ft (61.58 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records fair.

COOPERATION.--Gage-height record collected in cooperation with Somerset County.

EXTREMES FOR CURRENT YEAR.--Maximum discharge for period June to September, 3,080 ft³/s (87.2 m³/s) Sept. 6, gage height, 6.08 ft (1.853 m); minimum, 1.1 ft³/s (0.03 m³/s) Sept. 2, gage height, 1.14 ft (0.347 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1									---	3.0	1.5	1.3
2									---	3.0	12	1.2
3									---	2.1	4.8	1.7
4									---	3.0	3.0	1.4
5									---	2.4	2.1	1.8
6									---	2.1	5.2	158
7									---	1.8	3.0	11
8									---	1.8	2.1	4.2
9									---	2.1	1.8	3.0
10									---	2.1	4.2	2.4
11									---	2.1	4.5	2.1
12									---	2.1	35	1.8
13									---	1.8	9.9	1.8
14									---	5.2	4.2	4.2
15									---	2.4	3.3	3.0
16									---	2.8	2.8	2.1
17									---	4.8	2.4	2.1
18									---	8.0	3.6	2.4
19									---	3.9	3.6	2.1
20									---	2.8	2.8	1.8
21									---	2.4	2.4	9.9
22									---	2.4	2.4	46
23									---	2.8	2.4	8.7
24									---	2.4	6.2	4.8
25									---	2.1	3.6	3.9
26									---	2.1	2.4	3.6
27									2.4	1.8	3.3	3.0
28									2.8	1.5	2.8	2.8
29									2.8	4.2	3.3	3.3
30									2.8	2.4	2.8	4.8
31									---	1.5	2.4	---
TOTAL									---	84.9	145.8	300.2
MEAN									---	2.74	4.70	10.0
MAX									---	8.0	35	158
MIN									---	1.5	1.5	1.2
CFSM									---	.44	.75	1.61
IN.									---	.51	.87	1.79

01403500 GREEN BROOK AT PLAINFIELD, NJ

LOCATION.--Lat 40°36'53", long 74°25'55", Union County, Hydrologic Unit 02030105, on left bank 20 ft (6 m) downstream from bridge on Sycamore Avenue in Plainfield, and 1.0 mi (1.6 km) upstream from Stony Brook.

DRAINAGE AREA.--9.75 mi^2 (25.25 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1938 to current year.

REVISED RECORDS.--WSP 921: 1938-40. WRD-NJ 1969: 1966-68. WRD-NJ 1973: 1968(M), 1969(M), 1971(M).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 70.37 ft (21.449 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records fair. Water diverted from Baltusrol well field by Commonwealth Water Co., and from wells in vicinity of Mountainside and Scotch Plains by Plainfield-Union Water Co., for municipal supply and from private and industrial wells in Plainfield and vicinity. Diurnal fluctuations at low flow caused by pumping from wells near brook in Plainfield. During extreme high stages there is some overflow above gage from Green Brook basin to adjacent Stony Brook and Cedar Brook basins.

AVERAGE DISCHARGE.--41 years, 12.8 ft^3/s (0.362 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,890 ft^3/s (81.8 m^3/s) July 23, 1938, gage height, 5.82 ft (1.774 m) from rating curve extended above 1,300 ft^3/s (36.8 m^3/s) on basis of contracted-opening measurement of peak flow (an unknown additional amount probably bypassed gage); no flow part or all of some days in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 380 ft^3/s (10.8 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage Height (ft)	Gage Height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage Height (ft)	Gage Height (m)
Jan. 21	0700	626	17.7	3.02	0.920	May 24	2345	482	13.7	2.67	0.814
Jan. 24	1945	592	16.8	2.94	0.896	July 17	2215	443	12.5	2.57	0.783
Feb. 24	0800	497	14.1	2.71	0.826	Sept. 6	0930	*922	26.1	3.72	1.134
Mar. 6	1115	567	16.1	2.88	0.878	Sept. 21	2400	686	19.4	3.17	0.966

Minimum discharge, 0.01 ft^3/s (0.0001 m^3/s) Oct. 25, gage height, 0.51 ft (0.155 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.96	.24	5.8	21	13	31	7.6	8.6	15	4.3	1.3	.96
2	1.1	.57	3.6	112	11	29	12	7.6	12	4.7	38	.81
3	.96	.20	3.0	51	11	24	13	7.1	17	1.9	13	1.3
4	5.0	.17	17	19	10	20	12	8.1	19	3.0	3.9	.96
5	2.2	.20	21	12	8.1	23	15	6.2	15	2.7	2.2	.96
6	7.1	.20	6.7	12	6.7	321	9.6	5.4	12	1.7	11	201
7	1.5	.17	4.7	29	6.7	118	12	5.0	8.6	1.5	4.7	20
8	1.1	.17	16	204	7.6	44	12	4.3	7.6	1.3	2.7	8.6
9	1.3	.34	151	44	6.7	30	29	4.3	7.1	1.3	1.7	5.8
10	.81	.58	30	22	3.3	24	34	3.9	6.2	1.5	9.1	4.7
11	.58	.58	13	16	3.0	66	15	3.6	40	1.5	12	3.9
12	.68	.68	9.4	13	2.9	25	12	6.2	17	1.3	56	3.3
13	.68	.68	8.1	23	2.8	20	11	6.7	8.6	1.3	20	3.3
14	2.7	.58	7.1	25	2.8	20	53	11	6.2	11	5.4	12
15	.96	.68	6.2	14	2.7	17	27	7.1	5.4	2.2	3.6	7.6
16	.58	.68	5.4	11	2.6	13	17	4.3	5.0	2.2	2.7	3.0
17	.68	12	7.6	9.6	2.5	13	13	3.3	9.1	24	2.4	2.7
18	.68	26	6.4	8.6	2.5	12	12	12	12	22	4.7	2.4
19	.68	3.6	5.4	6.2	2.7	11	11	24	6.2	6.2	5.8	2.4
20	1.5	1.7	5.0	7.1	2.4	10	9.1	17	3.9	2.4	2.4	1.9
21	.81	1.3	40	314	3.3	9.6	8.6	8.6	3.3	1.7	1.9	58
22	.58	1.1	11	77	15	8.6	7.6	6.7	3.3	1.5	1.9	134
23	.50	5.0	8.1	30	12	8.1	7.6	84	6.2	1.3	1.7	13
24	.34	17	18	181	175	18	6.7	184	3.3	1.3	17	6.7
25	.28	3.6	94	136	172	23	6.7	194	2.7	1.1	4.7	4.7
26	.42	2.2	17	49	194	12	17	68	2.4	1.1	1.9	3.9
27	17	2.2	12	33	62	9.1	37	37	2.2	.96	1.9	3.0
28	.81	7.1	7.6	26	38	7.0	18	25	2.4	.96	3.3	2.7
29	.34	7.1	6.7	22	---	10	15	24	3.0	12	3.9	6.2
30	.24	20	6.2	19	---	8.1	9.6	26	2.7	3.6	2.7	24
31	.28	---	8.6	16	---	7.1	---	21	---	1.3	1.5	---
TOTAL	53.35	116.62	561.6	1562.5	782.3	991.6	470.1	834.0	264.4	124.82	245.0	543.79
MEAN	1.72	3.89	18.1	50.4	27.9	32.0	15.7	26.9	8.81	4.03	7.90	18.1
MAX	17	26	151	314	194	321	53	194	40	24	56	201
MIN	.24	.17	3.0	6.2	2.4	7.0	6.7	3.3	2.2	.96	1.3	.81

CAL YR 1978 TOTAL 5997.43 MEAN 16.4 MAX 333 MIN .17
WTR YR 1979 TOTAL 6550.08 MEAN 17.9 MAX 321 MIN .17

01403540 STONY BROOK AT WATCHUNG, NJ

LOCATION.--Lat 40°38'12", long 74°27'06", Somerset County, Hydrologic Unit 02030105 on right bank at Watchung Borough Administration Building, 150 ft (45.7 m) downstream from Watchung Avenue Bridge, and 2.9 mi (4.7 km) upstream from confluence with Green Brook.

DRAINAGE AREA.--5.51 mi² (14.27 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1974 to current year.

GAGE.--Water-stage recorder. Datum of gage is 172.24 ft (52.499 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records good. Some regulation from Watchung and Best Lakes directly upstream from station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,420 ft³/s (125 m³/s) July 14, 1975 (gage height, 10.40 ft or 3.170 m) from rating curve extended above 500 ft³/s (14.2 m³/s) on basis of slope-area measurements of peak flow; minimum, 0.34 ft³/s (0.010 m³/s) Aug. 3, 4, 1978, gage height, 0.92 ft (0.280 m).

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Aug. 2, 1973, reached a stage of 14.5 ft (4.42 m), from floodmark, discharge, 11,400 ft³/s (323 m³/s) from slope-area measurements of peak flow.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 250 ft³/s (7.08 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage Height (ft)	Gage Height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage Height (ft)	Gage Height (m)
Jan. 8	0145	289	8.18	3.77	1.149	Mar. 6	1005	453	12.8	4.51	1.375
Jan. 21	0720	552	15.6	4.84	1.475	May 24	2225	657	18.6	5.14	1.567
Jan. 24	1910	669	18.9	5.17	1.576	Sept. 6	0725	*1450	41.1	6.78	2.067
Feb. 26	0440	506	14.3	4.69	1.430	Sept. 22	0010	588	16.7	4.95	1.509

Minimum discharge, 0.46 ft³/s (0.013 m³/s) July 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.75	1.0	5.8	18	11	26	7.1	19	13	2.5	.89	1.4
2	.75	1.5	4.2	81	9.6	25	9.6	2.1	11	2.7	27	1.5
3	.62	1.0	3.4	31	8.5	20	11	1.9	12	1.9	4.4	1.5
4	1.4	.89	13	13	8.2	18	10	11	15	1.9	3.7	1.4
5	1.4	1.2	20	11	7.1	21	13	1.9	13	1.9	2.3	18
6	2.5	1.2	7.5	10	5.8	192	8.9	1.7	11	1.5	2.5	155
7	1.2	1.2	5.2	18	5.8	57	7.1	1.5	8.9	1.4	2.1	10
8	.89	1.2	10	173	5.8	29	7.1	1.5	7.8	1.4	1.5	5.5
9	.75	1.2	102	28	5.2	23	28	1.4	6.8	1.2	1.2	3.7
10	.75	1.0	24	17	5.0	20	23	1.2	6.1	1.0	3.4	3.0
11	.75	1.2	11	14	4.7	48	13	1.0	32	1.0	3.2	2.5
12	.89	.89	8.5	12	4.4	21	11	3.0	15	.89	34	1.7
13	.75	1.2	7.1	15	4.2	17	9.6	5.2	8.5	.75	14	1.5
14	1.7	1.2	6.1	20	4.2	17	36	6.1	6.8	1.7	5.0	3.9
15	1.2	1.0	5.2	12	3.9	14	21	5.0	5.8	1.0	3.4	4.4
16	.75	1.4	4.7	9.6	3.7	12	14	3.4	5.2	.89	2.7	1.7
17	.75	4.4	7.5	8.9	3.4	11	12	2.7	4.7	5.5	2.3	1.4
18	.75	20	5.2	8.2	3.4	10	11	5.0	5.5	6.8	2.7	1.4
19	.75	3.7	4.2	6.8	3.9	8.9	10	15	4.2	3.0	3.9	1.0
20	.89	2.3	4.2	6.8	3.7	8.2	8.9	16	3.4	1.4	2.5	.89
21	.75	1.9	32	235	3.9	7.5	8.2	7.8	3.0	1.2	2.1	39
22	.75	1.7	10	38	6.8	7.1	7.5	5.5	3.2	1.0	2.1	89
23	1.0	2.5	7.5	20	7.1	6.4	6.8	59	3.7	.75	1.7	6.4
24	1.2	14	17	151	104	14	20	175	2.7	1.0	11	3.0
25	1.4	3.9	69	83	109	20	14	144	2.5	.89	6.1	1.9
26	2.5	2.7	15	31	148	10	5.2	34	2.1	.75	2.1	1.4
27	9.3	2.7	11	25	36	8.2	16	24	1.9	.75	1.9	.89
28	2.3	3.4	7.8	21	28	7.1	16	20	1.9	.62	2.5	.62
29	1.4	4.2	6.4	17	---	8.5	14	21	2.5	3.7	3.2	1.4
30	1.4	17	5.8	15	---	7.8	24	24	2.1	3.0	2.4	7.8
31	1.2	---	6.4	13	---	7.5	---	17	---	1.2	1.5	---
TOTAL	43.39	102.68	446.7	1162.3	554.1	702.2	403.0	636.9	221.3	55.19	159.29	372.80
MEAN	1.40	3.42	14.4	37.5	19.8	22.7	13.4	20.5	7.38	1.78	5.14	12.4
MAX	9.3	20	102	235	148	192	36	175	32	6.8	34	155
MIN	.62	.89	3.4	6.8	3.4	6.4	5.2	1.0	1.9	.62	.89	.62
CFSM	.25	.62	2.61	6.81	3.59	4.12	2.43	3.72	1.34	.32	.93	2.25
IN.	.29	.69	3.02	7.85	3.74	4.74	2.72	4.30	1.49	.37	1.08	2.52

CAL YR 1978 TOTAL 3986.96 MEAN 10.9 MAX 190 MIN .41 CFSM 1.98 IN 26.91
WTR YR 1979 TOTAL 4860.05 MEAN 13.3 MAX 235 MIN .62 CFSM 2.41 IN 32.81

01404100 RARITAN RIVER NEAR SOUTH BOUND BROOK, NJ
(National stream-quality accounting network and Pesticide program station)

LOCATION.--Lat 40°30'47", long 74°32'24", Somerset County, Hydrologic Unit 02030105, at bridge on Interstate Route 287, 0.2 mi (0.3 km) downstream from Fieldsville Dam, and 1.5 mi (2.4 km) southeast of South Bound Brook.

DRAINAGE AREA.--862 mi^2 (2,233 km^2).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1966 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: May 1969 to March 1977.
pH: May 1969 to March 1977.
WATER TEMPERATURES: May 1969 to March 1977.
DISSOLVED OXYGEN: May 1969 to March 1977.

REMARKS.--Instantaneous water discharge estimated from discharge at 01403060, Raritan River below Calco Dam, at Bound Brook, 01403900 Bound Brook at Middlesex, and drainage area relationship.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (NTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
OCT												
26...	1030	E170	744	7.9	13.0	3.0	8.6	5.2	K12	32	160	48
NOV												
29...	1115	E363	530	7.3	4.0	5.0	11.8	5.3	50	36000	120	35
DEC												
14...	1020	E1140	245	7.2	3.0	15	13.0	3.3	500	280	68	16
JAN												
10...	1045	E4370	192	6.9	.0	15	13.8	3.2	730	5200	53	13
FEB												
21...	1115	E600	363	6.3	1.0	5.0	--	--	350	110	87	23
MAR												
29...	1130	E1380	289	7.2	8.5	6.0	11.8	4.2	48	240	75	20
APR												
18...	1000	E1800	241	7.1	10.0	5.0	11.8	--	43	K4	63	16
MAY												
17...	1230	E497	420	7.3	19.5	4.0	8.6	5.2	130	100	98	27
JUN												
28...	1130	E378	444	7.3	23.0	1.0	7.3	5.0	190	32	110	31
JUL												
31...	1130	E580	301	7.1	25.5	15	6.0	6.0	K2300	260	85	23
AUG												
22...	1420	E296	394	7.6	22.5	3.0	3.9	--	--	--	100	29
SEP												
25...	1200	E1390	210	6.7	16.0	5.0	9.8	3.9	E4600	340	74	20

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SEDIMENT, SUSPENDED (MG/L)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)
OCT												
26...	10	75	8.6	67	120	110	.3	5.5	433	7	100	1.8
NOV												
29...	8.6	48	4.5	53	76	80	.1	10	298	97	96	1.9
DEC												
14...	6.7	15	3.0	31	36	23	.1	12	151	120	43	2.5
JAN												
10...	5.0	13	2.2	19	23	21	.0	9.5	117	41	89	1.8
FEB												
21...	7.1	27	3.5	42	46	41	.1	13	210	6	--	2.6
MAR												
29...	6.0	20	2.4	34	43	31	.1	9.2	165	8	79	--
APR												
18...	5.7	16	2.1	27	33	23	.1	9.1	138	10	84	--
MAY												
17...	7.4	35	3.8	26	57	47	.1	10	234	13	82	1.5
JUN												
28...	8.0	35	3.6	28	71	8	.1	7.5	254	8	75	1.5
JUL												
31...	6.6	20	3.4	36	40	29	.1	9.9	182	35	83	1.6
AUG												
22...	7.0	33	3.5	51	56	45	.2	8.9	260	9	--	1.5
SEP												
25...	5.8	16	2.7	29	38	26	.1	12	160	20	81	2.4

01404100 RARITAN RIVER NEAR SOUTH BOUND BROOK, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHATE, TOTAL (MG/L AS PO4)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)
OCT 26...	7.4	8.6	16	6.3	9.7	18	.47	--	.40	8.2	--	--
NOV 29...	3.3	.80	4.1	.40	3.7	6.0	.34	--	.23	--	6.1	4.9
DEC 14...	.59	.61	1.2	.10	1.1	3.7	.15	--	.10	5.3	--	--
JAN 10...	.32	.44	.76	.60	.16	2.6	.12	--	.06	3.3	--	--
FEB 21...	3.0	.10	3.1	.10	3.[illegible]	5.7	.24	--	.18	--	2.8	--
MAR 29...	--	--	--	--	--	--	--	--	--	--	--	--
APR 18...	--	--	--	--	--	--	--	--	--	--	--	--
MAY 17...	1.8	2.3	4.1	.10	4.0	5.6	.29	.89	.24	--	5.2	.6
JUN 28...	2.6	1.3	3.9	.40	3.5	5.4	.26	.80	.20	5.2	--	--
JUL 31...	1.5	1.1	2.6	.40	2.2	4.2	.28	--	.17	6.7	--	--
AUG 22...	1.8	.90	2.7	.10	2.6	4.2	.26	--	.19	--	5.1	1.1
SEP 25...	1.3	.70	2.0	.20	1.8	4.4	.12	--	.07	4.5	--	--

DATE	TIME	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BARIUM, SUS-PENDED RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM SUS-PENDED RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)
NOV 29...	1115	2	2	0	0	0	--	--	--	10
FEB 21...	1115	1	1	100	0	100	--	0	--	<10
MAY 17...	1230	3	3	100	0	100	1	0	1	20
AUG 22...	1420	2	2	100	40	60	1	1	0	10

DATE	CHRO-MIUM, SUS-PENDED RECOV. (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COBALT, SUS-PENDED RECOV-ERABLE (UG/L AS CO)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, SUS-PENDED RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, SUS-PENDED RECOV-ERABLE (UG/L AS FE)
NOV 29...	8	2	1	1	0	14	9	5	1900	1800
FEB 21...	<9	1	1	0	1	6	3	3	330	290
MAY 17...	0	20	0	0	0	5	2	3	500	430
AUG 22...	0	10	3	3	0	6	1	5	350	320

DATE	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, SUS-PENDED RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, SUS-PENDED RECOV. (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY SUS-PENDED RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)
NOV 29...	120	--	--	--	110	40	70	<.5	.0	<.5
FEB 21...	40	--	0	--	120	30	90	<.5	.0	<.5
MAY 17...	70	9	5	4	180	40	140	<.5	.0	<.5
AUG 22...	30	6	6	0	70	30	40	<.5	.0	<.5

01404100 RARITAN RIVER NEAR SOUTH BOUND BROOK, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, SUSPENDED TOTAL (UG/L AS SE)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	SILVER, SUSPENDED RECOVERABLE (UG/L AS AG)	SILVER, DISSOLVED (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, SUSPENDED RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)
NOV 29...	0	0	0	0	0	0	50	30	20
FEB 21...	0	0	0	0	0	0	20	0	20
MAY 17...	0	0	0	0	0	0	50	40	10
AUG 22...	0	0	0	0	0	0	40	20	20

DATE	TIME	AROCLOR TOTAL 1254 PCB SERIES (UG/L)	PCB, TOTAL (UG/L)	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	ALDRIN, TOTAL (UG/L)	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL (UG/L)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL (UG/L)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL (UG/L)
NOV 29...	1115	.0	ND	--	ND	--	ND	--	ND	--	ND
FEB 21...	1115	.0	--	--	ND	--	ND	--	ND	--	ND
MAY 17...	1230	--	ND	ND	ND	ND	ND	ND	ND	ND	ND
AUG 22...	1420	--	ND	--	ND	--	ND	--	ND	--	ND

DATE	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL (UG/L)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIAZINON, TOTAL (UG/L)	DIAZINON, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL (UG/L)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL (UG/L)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ETHION, TOTAL (UG/L)	ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG)
NOV 29...	--	ND	--	ND	--	ND	--	ND	--	ND	--
FEB 21...	--	ND	--	ND	--	ND	--	ND	--	ND	--
MAY 17...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
AUG 22...	--	ND	--	ND	--	ND	--	ND	--	ND	--

DATE	HEPTACHLOR, TOTAL (UG/L)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE TOTAL (UG/L)	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL (UG/L)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	MALATHION, TOTAL (UG/L)	MALATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	METHOXYCHLOR, TOTAL (UG/L)	METHOXYCHLOR, TOT. IN BOTTOM MATL. (UG/KG)
NOV 29...	ND	--	ND	--	ND	--	ND	--	ND	--
FEB 21...	ND	--	ND	--	ND	--	ND	--	ND	--
MAY 17...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
AUG 22...	ND	--	ND	--	ND	--	ND	--	ND	--

DATE	METHYL PARATHION, TOTAL (UG/L)	METHYL PARATHION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRITHION, TOTAL (UG/L)	METHYL TRITHION, TOT. IN BOTTOM MATL. (UG/KG)	PARATHION, TOTAL (UG/L)	PARATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	TOTAL TRITHION (UG/L)	TRITHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE, TOTAL (UG/L)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)
NOV 29...	ND	--	ND	--	ND	--	ND	--	ND	--
FEB 21...	ND	--	ND	--	ND	--	ND	--	ND	--
MAY 17...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
AUG 22...	ND	--	ND	--	ND	--	ND	--	ND	--

01404100 RARITAN RIVER NEAR SOUTH BOUND BROOK, NJ--Continued
PHYTOPLANKTON ANALYSES, OCTOBER 1978 TO SEPTEMBER 1979

DATE	NOV 29,78	MAR 29,79	MAY 17,79	JUN 28,79
TIME	1115	1130	1230	1130
TOTAL CELLS/ML	870	3500	13000	10000
DIVERSITY: DIVISION	1.4	1.2	1.0	1.6
.CLASS	1.4	1.2	1.0	1.6
..ORDER	2.0	1.9	1.4	2.0
...FAMILY	2.6	2.2	1.5	2.1
....GENUS	0.0	2.6	2.8	2.5

ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
CHLOROPHYTA (GREEN ALGAE)								
.CHLOROPHYCEAE								
..CHLOROCOCCALES								
...CHARACIACEAE								
....SCHROEDERIA	--	-	--	-	--	-	--	-
...CHLOROCOCCACEAE								
....CHLOROCOCCUM	--	-	--	-	--	-	--	-
...MICRACTINIACEAE								
....GOLENKINIA	--	-	--	-	--	-	--	-
....MICRACTINIUM	--	-	--	-	--	-	--	-
...OOCYSTACEAE								
....ANKISTRODESMUS	15	2	160	4	140	1	●	0
....CHODATELLA	--	-	--	-	140	1	--	-
....CLOSTERIOPSIS	--	-	--	-	--	-	--	-
....GLOEOACTINIUM	--	-	--	-	--	-	--	-
....KIRCHNERIELLA	--	-	32	1	--	-	--	-
....OOCYSTIS	--	-	--	-	280	2	--	-
....SELENASTRUM	--	-	--	-	280	2	●	0
....TETRAEDRON	--	-	--	-	--	-	●	0
....TREUBARIA	--	-	--	-	--	-	--	-
...SCENEDESMACEAE								
....CRUCIGENIA	--	-	--	-	--	-	200	2
....SCENEDESMUS	--	-	250	7	990	7	3100°	31
....TETRASTRUM	--	-	--	-	280	2	400	4
..TETRASPORALES								
...PALMELLACEAE								
....SPHAEROCYSTIS	--	-	--	-	570	4	--	-
..VOLVOCALES								
...CHLAMYDOMONADACEAE	100	12	--	-	--	-	--	-
....CHLAMYDOMONAS	--	-	630°	18	140	1	250	2
CHRYSOPHYTA								
.BACILLARIOPHYCEAE								
..CENTRALES								
...COSCINODISCACEAE								
....CYCLOTELLA	--	-	1700°	47	4200°	32	3000°	29
....MELOSIRA	190°	22	130	4	3700°	28	100	1
....STEPHANODISCUS	--	-	--	-	1700	13	--	-
..PENNALES								
...ACHNANTHACEAE								
....ACHNANTHES	--	-	--	-	--	-	150	1
....COCCONEIS	29	3	--	-	--	-	--	-
....RHOICOSPHENIA	29	3	--	-	--	-	--	-
...CYMBELLACEAE								
....CYMBELLA	29	3	--	-	--	-	--	-
...FRAGILARIACEAE								
....ASTERIONELLA	--	-	130	4	--	-	--	-
....FRAGILARIA	--	-	63	2	--	-	--	-
....SYNEDRA	15	2	32	1	--	-	--	-
...NAVICULACEAE								
....GYROSIGMA	15	2	--	-	--	-	--	-
....NAVICULA	100	12	130	4	--	-	--	-
....PINNULARIA	15	2	--	-	--	-	--	-
....STAURONEIS	15	2	--	-	--	-	--	-
...NITZSCHIACEAE								
....NITZSCHIA	29	3	63	2	210	2	●	0
CYANOPHYTA (BLUE-GREEN ALGAE)								
.CYANOPHYCEAE								
..CHROOCOCCALES								
...CHROOCOCCACEAE								
....AGMENELLUM	--	-	--	-	--	-	--	-
....ANACYSTIS	--	-	--	-	570	4	450	4
..HORMOGONALES								
...NOSTOCACEAE								
....ANABAENA	--	-	--	-	--	-	--	-
...OSCILLATORIACEAE								
....LYNGBYA	190°	22	--	-	--	-	--	-
....OSCILLATORIA	100	12	--	-	--	-	2300°	22
EUGLENOPHYTA (EUGLENOIDS)								
.EUGLENOPHYCEAE								
..EUGLENALES								
...EUGLENACEAE								
....EUGLENA	--	-	32	1	--	-	--	-
....PHACUS	--	-	--	-	--	-	--	-
....TRACHELOMONAS	--	-	220	6	71	1	--	-

NOTE: ° - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
● - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

01404100 RARITAN RIVER NEAR SOUTH BOUND BROOK, NJ--Continued
PHYTOPLANKTON ANALYSES, OCTOBER 1978 TO SEPTEMBER 1979

DATE	JUL 31,79		AUG 22,79		SEP 25,79	
TIME	1130		1420		1200	
TOTAL CELLS/ML	14000		7000		3000	
DIVERSITY: DIVISION	1.2		1.4		0.9	
.CLASS	1.2		1.4		0.9	
..ORDER	2.1		1.7		1.1	
...FAMILY	2.7		2.0		1.2	
....GENUS	2.9		2.9		1.3	
ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)						
.CHLOROPHYCEAE						
..CHLOROCOCCALES						
...CHARACIACEAE						
....SCHROEDERIA	--	-	42	1	--	-
...CHLOROCOCCACEAE						
....CHLOROCOCCUM	66	1	--	-	--	-
...MICRACTINIACEAE						
....GOLENKINIA	--	-	290	4	--	-
....MICRACTINIUM	460	3	--	-	52	2
...OOCYSTACEAE						
....ANKISTRODESMUS	■	0	170	2	■	0
....CHODATELLA	--	-	42	1	--	-
....CLOSTERIOPSIS	--	-	42	1	--	-
....GLOEOACTINIUM	86	1	--	-	--	-
....KIRCHNERIELLA	--	-	--	-	--	-
....OOCYSTIS	■	0	170	2	--	-
....SELENASTRUM	--	-	340	5	52	2
....TETRAEDRON	--	-	--	-	■	0
....TREUBARIA	■	0	--	-	--	-
...SCENEDESMACEAE						
....CRUCIGENIA	--	-	--	-	--	-
....SCENEDESMUS	750	5	84	1	52	2
....TETRASTRUM	--	-	170	2	--	-
..TETRASPORALES						
...PALMELLACEAE						
....SPHAEROCYSTIS	2000	14	--	-	--	-
..VOLVOCALES						
...CHLAMYDOMONADACEAE	--	-	--	-	--	-
....CHLAMYDOMONAS	■	0	420	6	26	1
CHRYSOPHYTA						
.BACILLARIOPHYCEAE						
..CENTRALES						
...COSCINODISCACEAE						
....CYCLOTELLA	370	3	1700°	24	39	1
....MELOSIRA	320	2	2500°	36	300	10
....STEPHANODISCUS	--	-	--	-	--	-
..PENNALES						
...ACHNANTHACEAE						
....ACHNANTHES	--	-	--	-	--	-
....COCCONEIS	--	-	--	-	--	-
....RHOICOSPHENIA	--	-	--	-	--	-
...CYMBELLACEAE						
....CYMBELLA	--	-	--	-	--	-
...FRAGILARIACEAE						
....ASTERIONELLA	--	-	--	-	--	-
....FRAGILARIA	--	-	--	-	--	-
....SYNEDRA	--	-	--	-	--	-
...NAVICULACEAE						
....GYROSIGMA	--	-	--	-	--	-
....NAVICULA	■	0	42	1	--	-
....PINNULARIA	--	-	--	-	--	-
....STAURONEIS	--	-	--	-	--	-
...NITZSCHIACEAE						
....NITZSCHIA	200	1	42	1	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)						
.CYANOPHYCEAE						
..CHROOCOCCALES						
...CHROOCOCCACEAE						
....AGMENELLUM	230	2	670	10	--	-
....ANACYSTIS	2000	15	170	2	90	3
..HORMOGONALES						
...NOSTOCACEAE						
....ANABAENA	2900°	21	--	-	--	-
...OSCILLATORIACEAE						
....LYNGBYA	--	-	--	-	--	-
....OSCILLATORIA	4000°	30	--	-	2300°	79
EUGLENOPHYTA (EUGLENOIDS)						
.EUGLENOPHYCEAE						
..EUGLENALES						
...EUGLENACEAE						
....EUGLENA	--	-	42	1	--	-
....PHACUS	--	-	42	1	--	-
....TRACHELOMONAS	■	0	42	1	--	-

NOTE: ° - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
■ - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

01404100 RARITAN RIVER NEAR SOUTH BOUND BROOK, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	LENGTH OF EXPO-SURE (DAYS)	PERI-PHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	PERI-PHYTON BIOMASS ASH WEIGHT G/SQ M	CHLOR-A PERI-PHYTON CHROMO-GRAPHIC FLUOROM (MG/M2)	CHLOR-B PERI-PHYTON CHROMO-GRAPHIC FLUOROM (MG/M2)
JAN					
10...	41	.390	.320	.000	.000
MAY					
17...	28	4.80	3.86	20.0	7.33
AUG					
22...	21	3.23	2.76	19.4	7.68

01404302 LAWRENCE BROOK AT DAVIDSONS MILL ROAD NEAR PATRICKS CORNER, NJ

LOCATION.--Lat 40°24'58", long 74°29'38", Middlesex County, Hydrologic Unit 02030105, at bridge on Davidsons Mill Road, 1,000 ft (304 m) upstream of Oakeys Brook, 1.0 mi (1.6 km) southwest of Patricks Corner, 1.5 mi (2.5 km) west of Paulas Corners, and 2.3 mi (3.8 km) south of Adams.

DRAINAGE AREA.--12.4 mi^2 (32.1 km^2).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
FEB 15...	0945	13	130	5.5	1.0	13.0	.3	13	<2	31	6.4
APR 10...	1330	34	115	6.1	8.5	11.7	1.2	7	11	25	5.3
JUN 06...	1130	23	76	5.8	18.5	8.7	1.6	1600	920	21	4.7
JUL 18...	1250	93	83	6.4	23.5	7.1	2.4	>2400	>2400	18	4.1
AUG 07...	1340	12	136	6.2	24.0	4.6	3.7	70	12	23	4.9

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
FEB 15...	3.6	10	1.6	6	0	5	--	23	13	.0
APR 10...	2.8	9.3	1.3	5	0	4	--	20	10	.0
JUN 06...	2.2	4.6	1.4	7	0	6	.0	12	7.2	.1
JUL 18...	2.0	5.8	1.8	11	0	9	--	15	7.6	.1
AUG 07...	2.7	15	1.7	15	0	12	--	24	11	.1

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHATE, TOTAL (MG/L AS PO4)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
FEB 15...	9.8	87	2.0	<.10	--	.50	2.5	.05	.05	2.6
APR 10...	6.0	78	1.8	<.10	--	.30	2.1	.13	.13	5.5
JUN 06...	9.1	76	<1.0	<.10	--	2.0	--	.13	.07	9.6
JUL 18...	5.6	69	<1.0	.20	1.7	1.9	--	.36	.36	12
AUG 07...	7.8	97	1.0	<.10	--	1.5	2.5	.52	.08	15

DATE	TIME	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	BORON, TOTAL RECOV-ERABLE (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)
JUN 06...	1130	210	3	0	40	0	20	5

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	PHENOLS (UG/L)
JUN 06...	2200	6	110	<.5	13	0	30	0

01405000 LAWRENCE BROOK AT FARRINGTON DAM, NJ

LOCATION.--Lat 40°27'00", long 74°27'05", Middlesex County, Hydrologic Unit 02030105, on left bank 300 ft (90 m) upstream from Farrington Dam, 0.7 mi (2.1 km) southwest of Milltown, and 5.4 mi (8.7 km) upstream from mouth.

DRAINAGE AREA.--34.4 mi² (89.1 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1927 to current year.

REVISED RECORDS.--WSP 781: Drainage area. WSP 1432: 1959(P).

GAGE.--Water-stage recorder above concrete dam. Datum of gage is 25.73 ft (7.843 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records fair. Records given herein include flow over dam and through blowoff gates. Flow regulated by Farrington Reservoir, capacity, 655,250,000 gal (2.48 hm³).

COOPERATION.--Water-stage recorder inspected by and records of openings of blowoff gates furnished by employees of City of New Brunswick.

AVERAGE DISCHARGE.--52 years, 39.4 ft³/s (1.116 m³/s), 15.56 in/yr (395 mm/yr), adjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,920 ft³/s (139 m³/s) July 21, 1975 (gage height, 26.93 ft or 8.208 m) from rating curve extended above 1,100 ft³/s (31 m³/s) on basis of weir formula; no flow at times when gates in dam were closed and water was below spillway.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 450 ft³/s (12.7 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage Height (ft)	Gage Height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage Height (ft)	Gage Height (m)
Jan. 8	1100	551	15.6	25.28	7.705	Mar. 6	1600	950	26.9	25.50	7.772
Jan. 21	1400	*1870	53.0	25.96	7.913	May 24	0300	1430	40.5	25.76	7.852
Jan. 24	2400	1310	37.1	25.70	7.833	Sept. 6	0900	1180	33.4	25.68	7.812
Feb. 26	0900	1160	32.9	25.62	7.809	Sept. 30	1300	1330	37.7	25.71	7.836

Minimum daily discharge, 6.8 ft³/s (0.19 m³/s) Oct. 24, 25, 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	20	29	37	46	90	34	34	46	16	25	18
2	14	20	18	165	40	78	40	21	43	19	21	16
3	12	16	15	175	34	66	43	19	40	16	66	16
4	13	16	15	66	25	58	43	19	90	16	58	16
5	13	15	21	43	21	55	49	19	78	19	40	15
6	13	15	27	41	19	561	43	18	49	16	21	561
7	13	15	24	54	21	297	25	16	43	15	21	131
8	12	15	19	415	21	105	25	16	40	14	18	55
9	11	15	155	136	19	78	52	16	34	13	15	40
10	11	15	174	66	19	62	86	16	25	12	16	25
11	11	14	70	45	18	100	55	14	49	12	25	19
12	13	13	47	40	18	74	46	18	74	12	78	18
13	14	12	42	42	18	58	40	21	46	11	86	16
14	13	12	39	67	18	55	86	21	34	46	50	25
15	12	12	37	52	18	52	100	21	21	70	25	46
16	12	12	35	42	19	46	62	18	19	43	18	21
17	9.9	12	35	39	18	46	49	16	40	25	18	18
18	8.4	12	32	28	16	46	43	19	43	115	18	16
19	8.0	13	31	19	21	43	40	105	25	95	18	15
20	7.6	13	28	24	18	40	34	143	19	52	19	14
21	7.2	14	41	1160	19	40	25	62	18	43	17	18
22	7.2	14	48	287	43	40	25	46	16	34	16	105
23	7.2	14	42	95	46	34	21	149	18	25	16	62
24	6.8	14	41	287	162	43	21	818	16	21	16	40
25	6.8	15	232	561	681	62	21	514	15	19	18	25
26	6.8	15	93	120	798	49	34	125	15	18	17	19
27	8.4	15	52	82	222	43	66	70	14	18	16	18
28	9.2	15	41	70	120	40	55	62	14	16	16	16
29	9.2	16	37	58	---	40	46	62	34	21	19	18
30	9.2	19	34	55	---	40	40	58	18	52	21	593
31	19	---	31	49	---	40	---	52	---	49	19	---
TOTAL	329.9	438	1585	4420	2538	2481	1349	2608	1036	953	847	2015
MEAN	10.6	14.6	51.1	143	90.6	80.0	45.0	84.1	34.5	30.7	27.3	67.2
MAX	19	20	232	1160	798	561	100	818	90	115	86	593
MIN	6.8	12	15	19	16	34	21	14	14	11	15	14
(†)	-0.3	+0.5	+0.6	0	+0.6	-0.7	0	+0.1	-0.3	+0.1	-0.2	+2.1
MEAN‡	10.3	14.1	51.7	143	91.2	79.3	45.0	84.2	34.2	30.8	27.1	69.3
CFSM‡	0.30	0.41	1.50	4.16	2.65	2.31	1.31	2.45	0.99	0.90	0.79	2.01
IN‡	0.35	0.46	1.73	4.80	2.76	2.66	1.46	2.82	1.11	1.03	0.91	2.25

CAL YR 1978 TOTAL 15453.2 MEAN 42.3 MAX 901 MIN 1.8 MEAN‡ 42.3 CFSM‡ 1.23 IN‡ 16.85
WTR YR 1979 TOTAL 20599.9 MEAN 56.4 MAX 1160 MIN 6.8 MEAN‡ 56.6 CFSM‡ 1.65 IN‡ 22.34

† Change in contents, in cubic feet per second, in Farrington Reservoir.
‡ Adjusted for change in contents.

NOTE.--Blowoff gates open Oct. 31 to Jan. 18.

01405030 LAWRENCE BROOK AT WESTONS MILLS, NJ

LOCATION.--Lat 40°28'59", long 74°24'45", Middlesex County, Hydrologic Unit 02030105, at bridge on Burnet Street in Westons Mills, 200 ft (61 m) downstream from outflow of Westons Mill Pond, and 0.5 mi (0.8 km) northwest of Interchange 9 of the New Jersey Turnpike.

DRAINAGE AREA.--42.0 mi^2 (108.8 km^2).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L)	COLI- FORM, FECAL, EC BROTH (MPN)	STREP- TOCOCCI FECAL (MPN)	HARD- NESS (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)
OCT 02...	1230	147	7.2	17.0	9.2	1.8	270	130	41	10
JAN 30...	1235	115	6.3	2.0	12.8	2.7	33	920	26	6.3
APR 11...	1000	152	6.4	8.5	12.0	4.1	>2400	49	34	8.3
JUN 14...	1030	124	6.7	20.5	8.4	2.0	920	79	32	7.8
JUL 12...	1310	120	6.9	23.5	8.0	2.6	--	--	37	8.9
AUG 07...	1150	107	6.7	26.5	6.4	2.7	490	110	25	6.3

DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	ALKA- LINITY (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)
OCT 02...	3.8	11	2.4	24	0	20	18	16	.1	1.6
JAN 30...	2.5	10	1.7	5	0	4	16	17	.1	4.8
APR 11...	3.3	12	2.0	10	0	8	22	20	.1	5.6
JUN 14...	3.0	9.3	1.8	15	0	12	16	14	.1	5.6
JUL 12...	3.5	11	2.0	21	0	17	18	19	.1	1.6
AUG 07...	2.2	8.7	2.1	11	0	9	14	14	.1	3.1

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	PHOS- PHATE, TOTAL (MG/L AS PO4)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 02...	94	.40	.20	2.1	2.3	2.7	.06	.01	4.1
JAN 30...	70	<1.0	.20	.60	.80	--	.25	.22	4.6
APR 11...	87	1.1	<.01	--	.40	1.5	.08	<.01	3.6
JUN 14...	69	1.0	.20	1.5	1.7	2.7	.09	.07	6.7
JUL 12...	98	.50	.30	.70	1.0	1.5	.04	.04	8.4
AUG 07...	69	<1.0	<.10	--	.80	--	.20	<.01	8.6

01405240 MATCHAPONIX BROOK NEAR ENGLISHTOWN, NJ

LOCATION.--Lat 40°19'21", long 74°21'35", Monmouth County, Hydrologic Unit 02030105, at bridge on Union Hill Road, 1.9 mi (3.1 km) north of Englishtown, 2.4 mi (3.8 km) southwest of Redshaw Corner, 2.8 mi (4.6 km) northwest of Gordons Corner, and 3.9 mi (6.3 km) upstream of Barclay Brook.

DRAINAGE AREA.--29.1 mi² (75.4 km²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)
FEB 14...	1120	--	253	6.1	.0	11.8	3.0	<20	<2	48
APR 02...	1030	94	213	6.4	9.0	10.0	1.0	<20	2	47
MAY 18...	1030	29	205	6.1	16.0	7.3	2.0	250	5	48

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
FEB 14...	13	3.8	18	2.8	7	--	43	30	.1
APR 02...	13	3.6	13	3.0	9	--	41	22	.1
MAY 18...	13	3.7	16	3.3	13	.0	38	21	.1

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHATE, TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
FEB 14...	11	144	1.1	1.2	.80	2.0	3.1	.11	2.9
APR 02...	9.2	118	1.1	1.5	1.1	2.6	3.7	.22	3.3
MAY 18...	11	133	1.0	1.7	.10	1.8	2.8	.99	6.2

DATE	TIME	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	BORON, TOTAL RECOV-ERABLE (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)
MAY 18...	1030	40	1	0	40	2	40	4

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	PHENOLS (UG/L)
MAY 18...	3000	14	190	<.5	24	0	30	0

01405285 BARCLAY BROOK NEAR ENGLISHTOWN, NJ

LOCATION.--Lat 40°20'53", long 74°21'27", Middlesex County, Hydrologic Unit 02030105, at bridge on Old Bridge-Englishtown Road, 0.6 mi (1.0 km) southwest of Redshaw Corner, 0.8 mi (1.3 km) upstream of mouth, 2.3 mi (3.6 km) southwest of Moerls Corner, and 3.5 mi (5.6 km) north of Englishtown.

DRAINAGE AREA.--4.94 mi² (12.79 km²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)
APR 02...	1150	9.4	265	3.8	9.0	10.7	2.0	50	11
MAY 18...	0900	2.5	230	3.2	14.0	6.5	1.0	700	79

DATE	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
APR 02...	27	6.8	2.5	13	2.3	0	--	56	17
MAY 18...	25	6.0	2.5	6.8	2.1	0	.0	49	10

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHATE, TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
APR 02...	.1	7.5	112	<1.0	2.5	.20	2.7	.02	4.2
MAY 18...	.0	8.2	102	<1.0	1.0	.60	1.6	.07	3.0

DATE	TIME	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	BORON, TOTAL RECOV-ERABLE (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)
MAY 18...	0900	1300	1	0	30	1	10	4

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	PHENOLS (UG/L)
MAY 18...	3900	8	270	<.5	21	0	70	0

01405302 MATCHAPONIX BROOK AT MUNDY AVENUE AT SPOTSWOOD, NJ

LOCATION.--Lat 40°23'22", long 74°22'55", Middlesex County, Hydrologic Unit 02030105, at bridge on Mundy Avenue in Spottswood, 0.2 mi (0.3 km) upstream from mouth, 0.5 mi (0.8 km) east of De Voe Lake dam, and 3.4 mi (5.5 km) southeast of Tanners Corners.

DRAINAGE AREA.--44.1 mi² (114.2 km²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)
APR 02...	1340	80	190	6.0	9.0	10.3	2.0	<20	5
MAY 29...	1045	152	126	5.3	16.0	7.4	3.0	250	>2400

DATE	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
APR 02...	41	11	3.4	12	2.7	6	--	40	19
MAY 29...	34	9.5	2.6	7.1	2.7	2	.0	29	11

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHATE, TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
APR 02...	.1	8.6	106	<1.0	1.2	.40	1.6	.03	3.0
MAY 29...	.1	6.7	88	<1.0	.70	1.4	2.1	1.5	14

DATE	TIME	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	BORON, TOTAL RECOV-ERABLE (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)
MAY 29...	1045	90	3	0	40	1	30	11

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	PHENOLS (UG/L)
MAY 29...	8900	25	170	<.5	16	0	160	0

01405340 MANALAPAN BROOK AT FEDERAL ROAD NEAR MANALAPAN, NJ

LOCATION.--Lat 40°17'46", long 74°23'53", Middlesex County, Hydrologic Unit 02030105, at bridge on Federal Road, 2.6 mi (4.2 km) north of Manalapan, 3.1 mi (5.0 km) southwest of Matchaponix, 3.3 mi (5.3 km) downstream of Still House Brook, and 4.1 mi (6.7 km) northeast of Applegartn.

DRAINAGE AREA.--20.9 mi² (54.1 km²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)
MAY									
03...	0950	108	7.0	13.0	5.2	2.0	<20	11	32
29...	1230	103	5.2	16.0	7.5	3.0	330	350	31

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
MAY									
03...	7.2	3.4	4.9	2.1	11	--	21	9.7	.2
29...	7.1	3.2	4.0	2.0	4	.0	23	8.3	.1

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHATE, TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
MAY									
03...	5.8	73	.89	<.10	--	.80	1.7	.11	3.1
29...	9.0	81	1.0	.20	1.3	1.5	2.5	.48	5.9

DATE	TIME	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	BORON, TOTAL RECOV-ERABLE (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)
MAY								
29...	1230	130	1	0	30	1	20	3

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	PHENOLS (UG/L)
MAY								
29...	2700	3	90	<.5	16	0	40	0

01405400 MANALAPAN BROOK AT SPOTSWOOD, NJ

LOCATION.--Lat 40°23'22", long 74°23'27", Middlesex County, Hydrologic Unit 02030105, on right bank of De Voe Lake Dam in Spotswood, 0.1 mi (0.2 km) upstream from Cedar Brook, and 0.6 mi (1.0 km) upstream from confluence with Matchaponix Brook.

DRAINAGE AREA.--40.7 mi² (105.4 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1957 to current year.

REVISED RECORDS.--WSP 1722: 1957-60.

GAGE.--Water-stage recorder above concrete dam. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Duhernal Water System). January 1957 to September 1966 at datum 17.72 ft (5.401 m) higher.

REMARKS.--Water-discharge records good except those for the periods when the waste gates were open, which are fair. Discharge given herein include flow over dam and through waste gates. Waste gates open Jan. 22-28, Feb. 21-25, Apr. 9-10. Some regulation by Lake Manalapan, Helmetta Pond, and De Voe Lake.

AVERAGE DISCHARGE.--22 years, 67.1 ft³/s (1.900 m³/s), 22.39 in/yr (569 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,650 ft³/s (46.7 m³/s) May 30, 1968, elevation, 19.90 ft (6.066 m), waste gates open; no flow part or all of some days in many years when gates were closed and water was below spillway.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,320 ft³/s (37.4 m³/s) Jan. 22, elevation, 19.72 ft (6.011 m) waste gates open; no flow parts of Jan. 27, 28, Feb. 22, 23, Apr. 9, 10 after waste gates were closed and water level was below dam.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	29	87	66	81	196	64	60	87	46	40	36
2	47	29	65	121	74	153	77	53	73	53	60	35
3	37	29	51	211	68	136	60	52	66	46	117	34
4	36	29	59	174	64	117	105	52	136	44	156	33
5	41	29	92	78	61	108	85	50	250	48	106	45
6	49	29	107	65	48	165	57	48	165	44	58	219
7	46	29	77	66	54	344	64	47	107	39	49	218
8	38	29	63	167	53	314	59	45	80	35	40	107
9	34	29	163	261	54	173	85	44	66	33	34	60
10	31	29	300	145	49	122	65	42	59	29	32	48
11	30	28	311	62	47	138	100	40	65	27	36	43
12	29	27	124	63	45	161	74	43	106	31	94	39
13	29	29	80	70	45	121	64	54	85	31	175	35
14	30	29	67	103	46	103	107	64	60	51	118	62
15	28	29	60	130	49	111	143	69	51	62	59	44
16	28	29	56	95	50	104	126	56	46	36	45	54
17	29	32	56	69	47	87	89	47	69	35	39	43
18	29	47	57	61	41	82	72	46	135	74	37	37
19	29	52	52	49	48	77	63	104	82	102	41	34
20	29	46	57	55	47	72	59	174	55	58	40	34
21	29	38	71	343	74	70	56	120	46	44	37	36
22	29	34	76	1100	94	67	55	76	43	38	35	111
23	29	34	71	440	83	66	53	85	52	35	32	102
24	29	43	60	200	200	94	52	328	49	33	39	61
25	28	48	117	360	370	105	52	421	43	36	48	48
26	28	42	120	440	980	83	67	310	38	35	46	45
27	33	39	75	105	717	80	86	158	35	31	39	43
28	34	47	77	48	296	68	106	94	35	29	51	40
29	32	59	58	76	---	66	89	108	60	32	61	41
30	30	81	52	87	---	68	74	126	50	54	54	116
31	29	---	52	84	---	66	---	115	---	51	45	---
TOTAL	1011	1103	2813	5394	3885	3717	2308	3131	2294	1342	1863	1903
MEAN	32.6	36.8	90.7	174	139	120	76.9	101	76.5	43.3	60.1	63.4
MAX	49	81	311	1100	980	344	143	421	250	102	175	219
MIN	28	27	51	48	41	66	52	40	35	27	32	33
CFSM	.80	.90	2.23	4.28	3.42	2.95	1.89	2.48	1.88	1.06	1.48	1.56
IN.	.92	1.01	2.57	4.93	3.55	3.40	2.11	2.86	2.10	1.23	1.70	1.74

CAL YR 1978 TOTAL 29090 MEAN 79.7 MAX 1130 MIN 25 CFSM 1.96 IN 26.59
WTR YR 1979 TOTAL 30764 MEAN 84.3 MAX 1100 MIN 27 CFSM 2.07 IN 28.12

01405440 MANALAPAN BROOK AT BRIDGE STREET AT SPOTSWOOD, NJ

LOCATION.--Lat 40°23'26", long 74°23'26", Middlesex County, Hydrologic Unit 02030105, at bridge on Bridge Street in Spotswood, 150 ft (46 m) downstream from Cedar Brook, and 400 ft (120 m) below DeVoe Lake Dam.

DRAINAGE AREA.--43.9 mi^2 (113.7 km^2).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--February to September 1979.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)
FEB									
14...	1330	126	6.0	.0	11.9	2.0	70	<20	30
MAY									
03...	1040	107	5.6	15.0	7.7	2.0	20	21	28
29...	0930	98	4.2	16.0	7.9	2.0	80	540	26

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
FEB									
14...	6.3	3.5	6.2	2.1	3	--	24	12	.1
MAY									
03...	6.0	3.1	5.6	2.0	5	--	22	10	.1
29...	5.8	2.7	5.0	2.0	2	.0	22	8.5	.1

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHATE, TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
FEB									
14...	8.7	81	1.5	.40	.50	.90	2.4	.05	2.3
MAY									
03...	5.5	72	<1.0	.20	1.2	1.4	--	.12	6.3
29...	7.4	78	<1.0	.30	1.5	1.8	--	.33	5.8

DATE	TIME	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	BORON, TOTAL RECOV-ERABLE (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)
MAY								
29...	0930	180	1	0	30	1	20	4

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	PHENOLS (UG/L)
MAY								
29...	2600	8	90	<.5	14	0	60	1

01405500 SOUTH RIVER AT OLD BRIDGE, NJ

LOCATION.--Lat 40°24'22", long 74°22'08", Middlesex County, Hydrologic Unit 02030105, on right abutment of Duhernal Dam, 0.6 mi (1.0 km) south of Old Bridge, 2.3 mi (3.7 km) upstream from Deep Run, and 9.1 mi (14.6 km) upstream from mouth.

DRAINAGE AREA.--94.6 mi^2 (245.0 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1939 to current year.

REVISED RECORDS.--WSP 1902: 1957.

GAGE.--Water-stage recorder above concrete dam. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those above 200 ft^3/s (5.66 m^3/s), which are fair, and those for October and November which are poor. The flow past this station is affected by pumpage from well fields for industrial use by Duhernal Water System. Some regulation by Duhernal Lake, capacity, 138,000,000 gal (522,300 m^3), Lake Manalapan, De Voe Lake, and several small ponds in headwater tributaries.

AVERAGE DISCHARGE.--40 years, 142 ft^3/s (4.021 m^3/s), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,250 ft^3/s (120 m^3/s) Sept. 15, 1944, elevation, 11.71 ft (3.569 m), waste gates open; maximum gage height, 11.73 ft (3.575 m) Aug. 28, 1971; no flow on days when waste gates were closed and water was below spillway.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,320 ft^3/s (94.0 m^3/s) Jan. 22, elevation, 11.48 ft (3.499 m); minimum daily, 31 ft^3/s (0.88 m^3/s) July 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	105	80	270	154	173	468	154	136	207	88	75	72
2	160	95	90	267	154	370	160	115	181	103	100	67
3	85	50	85	597	142	327	160	107	160	92	278	173
4	85	60	140	410	136	278	207	103	321	75	340	103
5	95	55	226	181	131	246	216	99	702	99	207	75
6	115	65	246	154	99	581	142	95	381	88	125	453
7	105	75	154	154	111	1420	142	85	236	70	99	684
8	90	75	125	565	111	832	136	81	181	59	75	278
9	65	65	381	912	111	381	189	75	154	52	59	148
10	40	65	912	424	99	267	267	70	136	48	50	107
11	45	65	666	211	95	367	226	67	142	43	54	88
12	65	65	256	148	92	410	173	72	267	50	207	75
13	65	65	173	154	92	267	160	115	189	48	484	70
14	70	55	154	314	95	226	267	160	136	62	290	85
15	65	60	131	314	103	278	438	166	107	103	142	160
16	65	90	115	198	103	226	290	125	92	64	95	136
17	65	75	120	154	95	198	207	92	120	54	75	92
18	65	80	120	142	81	189	181	81	314	125	67	72
19	65	135	107	103	88	181	154	236	181	340	75	62
20	65	105	99	115	85	166	142	468	120	148	78	59
21	65	95	166	1350	160	160	131	278	88	92	67	57
22	65	60	198	2580	166	154	120	173	78	72	59	256
23	65	80	154	871	302	154	115	207	103	62	52	246
24	65	85	131	499	438	166	111	912	99	54	62	136
25	65	135	468	1450	1400	302	107	1050	81	54	92	95
26	65	100	666	1190	2900	207	125	739	67	52	111	81
27	75	50	278	484	2140	181	236	353	54	48	78	72
28	80	75	166	278	813	160	236	216	31	45	107	67
29	75	165	136	246	---	160	198	302	131	47	136	67
30	70	150	111	216	---	166	160	353	120	111	154	246
31	65	---	107	189	---	160	---	302	---	125	111	---
TOTAL	2335	2475	7151	15024	10515	9648	5550	7433	5179	2573	4004	4382
MEAN	75.3	82.5	231	485	376	311	185	240	173	83.0	129	146
MAX	160	165	912	2580	2900	1420	438	1050	702	340	484	684
MIN	40	50	85	103	81	154	107	67	31	43	50	57

CAL YR 1978 TOTAL 66116 MEAN 181 MAX 2500 MIN 33
WTR YR 1979 TOTAL 76269 MEAN 209 MAX 2900 MIN 31

01405500 SOUTH RIVER AT OLD BRIDGE, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1977 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients, were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)
OCT										
02...	1000	82	141	6.2	14.0	7.0	2.4	350	350	34

DATE	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
OCT										
02...	8.1	3.3	8.5	2.9	10	0	8	27	14	.1

DATE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHATE, TOTAL (MG/L AS PO4)	PHOSPHATE, ORTHO, DISSOLVED (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT										
02...	7.0	91	1.2	.70	1.2	1.9	3.1	.96	.17	4.2

01405700 SOUTH RIVER BELOW DUHERNAL DAM AT OLD BRIDGE, NJ

LOCATION.--Lat 40°25'00", long 74°21'43", Middlesex County, Hydrologic Unit 02030105, at bridge on Old Bridge-South Amboy Road in Old Bridge, 0.5 mi (0.8 km) upstream of Deep Run, and 7.4 mi (11.9 km) upstream from mouth.

DRAINAGE AREA.--95.9 mi^2 (248.4 km^2).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976-77, January to September 1979.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
JAN 30...	1000	178	5.8	2.0	10.4	2.0	<2	13	41	9.8
APR 11...	1300	151	5.4	10.0	11.2	3.7	240	240	34	8.4
JUN 14...	1330	143	5.9	19.0	7.4	1.7	240	1600	34	8.2
JUL 18...	1010	154	6.2	24.5	6.3	1.6	540	540	32	7.7
AUG 07...	1020	180	5.7	25.0	4.3	2.1	3500	790	35	7.7

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
JAN 30...	3.9	15	2.4	5	0	4	29	24	.1	7.0
APR 11...	3.1	8.8	2.4	2	0	2	30	15	.1	6.5
JUN 14...	3.3	9.3	2.2	5	0	4	27	16	.1	7.8
JUL 18...	3.2	12	2.2	9	0	7	23	20	.1	6.3
AUG 07...	3.9	16	3.0	5	0	4	27	27	.1	6.9

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHATE, TOTAL (MG/L AS PO4)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
JAN 30...	100	<1.0	.40	.70	1.1	--	.16	.16	2.5
APR 11...	85	1.0	.60	.60	1.2	2.2	.07	<.01	2.5
JUN 14...	80	1.0	.40	1.4	1.8	2.8	.21	.11	6.4
JUL 18...	105	1.2	<1.0	--	--	--	.14	.14	7.6
AUG 07...	122	<1.0	<.10	--	.90	--	.60	.09	9.0

RESERVOIR IN RARITAN RIVER BASIN

01396790 SPRUCE RUN RESERVOIR.--Lat 40°38'30", long 74°55'19", Hunterdon County, Hydrologic Unit 02030105, at dam on Spruce Run, 0.5 mi (0.8 km) north of Clinton, and 0.6 mi (1.0 km) upstream from mouth. DRAINAGE AREA, 41.3 mi² (107.0 km²). PERIOD OF RECORD, November 1963 to current year. Nonrecording gage read daily. Datum of gage is National Geodetic Vertical Datum of 1929.

Reservoir is formed by earthfill dam with concrete spillway; dam completed in October 1963 with crest of spillway 273.00 ft (83.210 m). Usable capacity, 11,000,000,000 gal (41.635 hm³). Dead storage 300,000 gal (1,136 m³). Reservoir used for water supply and recreation. Outflow mostly regulated by gates. Water is released to maintain minimum flow on the South Branch Raritan River. Records given herein represent usable capacity. Records furnished by New Jersey Department of Environmental Protection.

EXTREMES FOR CURRENT YEAR: Maximum contents observed, 11,400,000,000 gal (43.14 hm³) Jan. 24, elevation, 274.72 ft (83.735 m); minimum observed, 10,400,000,000 gal (39.36 hm³) Apr. 2 elevation, 271.77 ft (82.836 m).

EXTREMES FOR PERIOD OF RECORD: Maximum contents observed, 11,400,000,000 gal (43.149 hm³) Jan. 24, 1979, elevation, 274.72 ft (83.735 m); minimum observed, 6,900,000,000 gal (26.116 hm³) Oct. 21, 1970, elevation, 261.97 ft (79.849 m).

01397050 ROUND VALLEY RESERVOIR.--Lat 40°36'39", long 74°50'42", Hunterdon County, Hydrologic Unit 02030105, at main dam on Prescott Brook, 1.8 mi (2.9 km) south of Lebanon, 3.2 mi (5.1 km) upstream from mouth, and 4.5 mi (7.2 km) west of Whitehouse. DRAINAGE AREA, 5.7 mi² (14.8 km²). PERIOD OF RECORD, March 1966 to current year. Nonrecording gage read daily. Datum of gage is National Geodetic Vertical Datum of 1929.

Reservoir is formed by earthfill dam at main dam on Prescott Brook, and two dams on South Branch Rockaway River at Lebanon; storage began in March 1966. Capacity at spillway level, 55,000,000,000 gal (208.175 hm³), elevation, 385.00 ft (117.348 m). Reservoir is used primarily for storage and is filled by pumping from South Branch Raritan River at Hamden Pumping Station (see following page). Outflow is controlled by operation of gates in pipe in dams. Water is released into South Branch Rockaway Creek and Prescott Brook. Records furnished by New Jersey Department of Environmental Protection.

EXTREMES FOR CURRENT YEAR: Maximum contents observed, 54,600,000,000 gal (206.66 hm³) June 12, elevation, 384.64 ft (117.236 m); minimum observed, 52,300,000,000 gal (197.96 hm³) Jan. 1, elevation, 381.66 ft (116.330 m).

EXTREMES FOR PERIOD OF RECORD: Maximum contents observed, 55,400,000 gal (209.7 hm³) June 15, 1975, elevation, 385.63 ft (117.540 m); minimum observed (after first filling), 52,300,000,000 gal (197.96 hm³) Jan. 1, 1979, elevation, 381.66 ft (116.330 m).

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

Date	Elevation* (feet)	Contents (million gallons)	Change in contents (equivalent in ft³/s)	Elevation* (feet)	Contents (million gallons)	Change in contents (equivalent in ft³/s)
	01396790 SPRUCE RUN RESERVOIR			013970500 ROUND VALLEY RESERVOIR		
Sept. 30	272.36	10,600	-	381.83	52,400	-
Oct. 31	270.33	9,800	-39.9	381.48	52,100	-15.0
Nov. 30	269.45	9,500	-15.5	381.41	52,100	0
Dec. 31	271.82	10,400	+44.9	381.60	52,200	+ 5.0
CAL YR 1978	-	-	-2.5	-	-	+4.2
Jan. 31	273.16	11,000	29.9	382.67	52,200	0
Feb. 28	273.21	11,100	+5.5	383.15	53,500	71.8
Mar. 31	271.77	10,400	-34.9	383.58	53,800	+15.0
Apr. 30	272.80	10,900	+25.8	383.96	54,100	+15.8
May 31	273.12	11,000	+5.0	384.43	54,500	+20.0
June 30	273.05	11,000	0	384.45	54,500	0
July 31	273.00	11,000	0	383.45	54,500	0
Aug. 31	272.99	11,000	0	383.45	54,500	0
Sept. 30	273.02	11,000	0	383.47	54,500	0
WTR YR 1979	-	-	+ 1.7	-	-	+8.9

* Elevation at 0800 on first day of following month.

DIVERSIONS IN RARITAN RIVER BASIN

01396920 Water is diverted 4.0 mi (6.4 km) upstream from the gaging station on South Branch Raritan River at Stanton (see sta 01397000), at the Hamden Pumping Station, for storage in Round Valley Reservoir. Records furnished by New Jersey Department of Environmental Protection.

01400490 Johns-Manville Products Corporation diverts water 1,500 ft (457 m) upstream from the gaging station on Raritan River at Manville (see sta 01400500) for cooling purposes and returns the water to the river 0.6 mi (1.0 km) below the station. Records furnished by the Johns-Manville Products Corporation.

01400509 Elizabethtown Water Company diverts water from the Raritan and Millstone Rivers just upstream from the mouth of the Millstone River. Records given herein represent the total diversion from both rivers. Records furnished by the Elizabethtown Water Company.

DIVERSIONS, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

Month	HAMDEN PUMPING STATION	JOHNS-MANVILLE PRODUCTS CORPORATION	ELIZABETHTOWN WATER COMPANY
October	0	7.4	139
November	0	7.3	121
December	0	6.5	123
CAL YR 1978	0	7.3	130
January	0	6.5	131
February	0	6.9	124
March	0	7.3	147
April	0	7.1	137
May	0	7.4	149
June	0	7.9	154
July	0	7.8	157
August	0	7.6	153
September	0	7.7	149
WTR YR 1979	0	7.3	141

01407253 WILLOW BROOK NEAR HOLMDEL, NJ

LOCATION.--Lat 40°19'47", long 74°10'26", Monmouth County, Hydrologic Unit 02030104, at bridge on Willow Brook Road, 0.6 mi (1.0 km) upstream of Big Brook, 1.2 mi (1.9 km) southeast of Holmdel, 1.3 mi (2.1 km) northeast of Vanderburg, and 1.6 mi (2.6 km) northwest of Sugar Loaf Hill.

DRAINAGE AREA.--7.52 mi^2 (19.48 km^2).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)
FEB 28...	1200	199	7.1	3.0	10.0	4.0	140	49	49
APR 19...	1150	199	7.6	12.0	10.6	2.0	80	5	62
MAY 22...	1240	--	6.6	16.0	8.7	--	330	350	64

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
FEB 28...	15	2.7	9.5	2.8	14	29	20	.1	8.0
APR 19...	19	3.5	8.2	2.1	21	32	18	.2	9.3
MAY 22...	20	3.4	11	2.5	29	30	18	.2	10

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHATE, TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
FEB 28...	105	1.0	.20	1.0	1.2	2.2	.47	2.9
APR 19...	123	1.0	<.10	--	.90	1.9	.14	--
MAY 22...	139	<.10	<1.0	--	<.03	--	.32	4.1

01407400 YELLOW BROOK AT COLTS NECK, NJ

LOCATION.--Lat 40°17'47", long 74°10'16", Monmouth County, Hydrologic Unit 02030104, at bridge on Creamery Road in Colts Neck, and 0.3 mi (0.5 km) upstream from Mine Brook.

DRAINAGE AREA.--9.71 mi^2 (25.15 km^2).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)
FEB 28...	1030	131	6.6	2.0	11.9	2.0	40	110
APR 19...	1330	119	7.6	13.5	10.4	1.0	130	14
MAY 22...	0930	122	6.0	16.0	8.9	--	490	540

DATE	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
FEB 28...	32	8.4	2.6	6.4	1.8	2	17	15	.1
APR 19...	37	9.6	3.2	6.0	1.4	15	14	14	.2
MAY 22...	38	10	3.2	6.5	1.6	16	13	13	.2

DATE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN,AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHATE, TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
FEB 28...	10	75	1.5	<.10	.93	2.4	.61	2.9
APR 19...	11	85	1.2	<.10	1.3	2.5	.06	--
MAY 22...	13	100	1.0	<.10	<.03	--	.28	3.0

01407500 SWIMMING RIVER NEAR RED BANK, NJ

LOCATION.--Lat 40°19'10", long 74°06'55", Monmouth County, Hydrologic Unit 02030104, on left bank, 50 ft (15 m) upstream from dam at Swimming River Reservoir, 3.3 mi (5.3 km) southwest of Red Bank, and 4.8 mi (7.7 km) upstream from mouth. Water-quality samples collected at bridge on Swimming River Road, 800 ft (244 m) downstream from gaging station.

DRAINAGE AREA.--48.5 mi² (125.6 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1922 to current year.

REVISED RECORDS.--WSP 781. Drainage area. WSP 891: 1939.

GAGE.--Water-stage recorder above dam. Datum of gage is 30.00 ft (9.144 m) National Geodetic Vertical Datum of 1929. Prior to Jan. 19, 1962, at site 800 ft (240 m) upstream at datum 17.67 ft (5.386 m) lower. Jan. 19 to Mar. 30, 1962, nonrecording gage, 700 ft (210 m) upstream at datum 13.87 ft (4.228 m) lower.

REMARKS.--Water-discharge records fair. Records given herein represent flow over spillway and flow or leakage through blowoff gates (no gate opening during the year). Diversion above station for municipal supply. Flow regulated by Swimming River Reservoir.

COOPERATION.--Water-stage recorder inspected by and record of diversion furnished by Monmouth Consolidated Water Co.

AVERAGE DISCHARGE.--57 years, 80.8 ft³/s (2.288 m³/s), 22.62 in/yr (575 mm/yr), adjusted for storage and diversion.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,910 ft³/s (252 m³/s) Oct. 27, 1943, gage height, 8.96 ft (2.731 m) site and datum then in use, from rating curve extended above 1,000 ft³/s (28.3 m³/s) on basis of weir formula; no flow some days in many years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,640 ft³/s (103 m³/s) Jan. 21, gage height, 6.88 ft (2.097 m); minimum daily, 0.60 ft³/s (0.017 m³/s) Sept. 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.0	5.3	47	69	84	190	69	63	84	42	16	26
2	4.0	4.9	33	163	63	176	76	52	69	57	28	38
3	4.0	4.0	26	244	63	151	91	57	76	35	76	84
4	4.9	3.6	38	76	69	139	91	57	298	31	57	38
5	9.9	3.3	84	52	63	128	109	52	190	42	52	28
6	57	3.3	52	57	57	744	69	47	118	31	31	485
7	52	3.0	35	69	69	654	47	47	84	22	26	163
8	31	3.0	33	404	76	257	52	47	76	18	19	35
9	22	4.0	389	204	63	176	84	42	63	14	13	24
10	17	4.4	360	84	57	151	128	28	52	12	9.2	21
11	15	4.4	100	63	52	270	76	26	63	15	8.0	18
12	13	4.4	63	47	52	190	63	38	84	17	109	16
13	11	4.0	52	84	57	139	63	91	52	15	204	9.9
14	11	4.0	42	220	52	151	163	190	42	11	63	9.2
15	11	3.6	42	91	52	151	190	100	35	9.9	33	13
16	8.6	4.0	38	57	57	109	100	69	31	9.2	26	14
17	8.0	5.3	47	52	52	100	76	42	69	8.0	19	11
18	7.4	17	35	52	47	100	69	42	118	21	16	9.2
19	7.4	22	31	38	76	91	63	109	57	52	19	7.4
20	7.4	18	31	47	63	91	57	190	42	33	19	6.9
21	6.9	15	76	1740	69	84	52	91	33	24	17	6.9
22	6.9	13	57	404	118	91	52	63	28	18	14	9.2
23	6.3	11	42	139	128	84	52	109	35	14	12	11
24	5.3	28	42	389	520	91	52	328	28	22	11	7.4
25	5.3	26	502	820	1450	109	52	232	24	42	42	4.4
26	4.9	19	139	244	1490	84	63	128	19	31	47	2.7
27	6.3	19	69	176	404	69	190	76	17	22	31	1.5
28	7.4	52	52	139	232	69	109	128	16	17	52	1.2
29	7.4	42	42	118	---	76	100	176	63	12	38	.60
30	5.8	76	42	100	---	84	76	204	42	18	63	17
31	5.8	---	47	91	---	76	---	109	---	18	35	---
TOTAL	372.9	426.5	2688	6533	5635	5075	2534	3033	2008	733.1	1205.2	1118.50
MEAN	12.0	14.2	86.7	211	201	164	84.5	97.8	66.9	23.6	38.9	37.3
MAX	57	76	502	1740	1490	744	190	328	298	57	204	485
MIN	3.0	3.0	26	38	47	69	47	26	16	8.0	8.0	.60
(†)	40.4	37.2	31.3	34.2	36.5	32.7	34.5	40.7	43.1	44.2	43.2	41.9
MEAN‡	52.4	51.4	118	245	238	196	119	139	110	67.8	82.1	79.2
CFSM‡	1.08	1.06	2.43	5.05	4.91	4.04	2.45	2.87	2.27	1.40	1.69	1.63
IN‡	1.25	1.18	2.81	5.82	5.10	4.67	2.74	3.29	2.53	1.61	1.95	1.82

CAL YR 1978 TOTAL 28376.10 MEAN 77.7 MAX 2400 MIN .00 MEAN‡ 116 CFSM‡ 2.39 IN‡ 32.46
WTR YR 1979 TOTAL 31362.20 MEAN 85.9 MAX 1740 MIN .60 MEAN‡ 124 CFSM‡ 2.56 IN‡ 34.79

† Diversion and change in contents in Swimming River Reservoir, in cubic feet per second.
‡ Adjusted for diversion and change in contents.

01407500 SWIMMING RIVER NEAR RED BANK, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to current year.

COOPERATION.--Selected field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)
OCT 05...	1020	9.9	270	7.6	16.0	6.6	1.0	790	540	61
FEB 28...	1330	220	132	6.8	2.0	10.0	4.0	490	>2400	29
APR 19...	1015	63	161	7.3	11.0	10.0	3.0	<20	<2	48
MAY 22...	1040	57	--	6.8	19.0	8.9	--	<20	2	51

DATE	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
OCT 05...	14	6.2	27	2.7	29	--	17	50	.2
FEB 28...	8.3	2.0	10	2.6	18	--	15	16	.1
APR 19...	14	3.1	8.7	2.2	18	--	25	17	.2
MAY 22...	15	3.3	9.2	2.2	20	.0	23	17	.2

DATE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHATE, TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 05...	7.5	159	<1.0	<.10	--	1.5	--	.20	3.6
FEB 28...	5.0	76	1.0	.30	1.2	1.5	2.5	.64	3.2
APR 19...	7.5	100	1.2	<.10	--	1.0	2.2	.11	--
MAY 22...	5.7	114	<.10	<1.0	--	<.05	--	.12	3.5

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
MAY 22...	1040	50	1	0	9	0	50	7

DATE	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	PHENOLS (UG/L)
MAY 22...	660	2	40	<.5	2	0	10	0

01407705 SHARK RIVER NEAR NEPTUNE CITY, NJ

LOCATION.--Lat 40°11'56", long 74°04'14", Monmouth County, Hydrologic Unit 02030104, on left bank 100 ft (30 m) upstream from bridge on Remsen Mill Road, 0.3 mi (0.5 km) downstream from Robins Swamp Brook, and 1.7 mi (2.7 km) west of Neptune City.

DRAINAGE AREA.--9.96 mi^2 (25.80 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1966 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 7.05 ft (2.149 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records fair. Diversion above station by Monmouth Consolidated Water Co. for municipal supply and by farmers for irrigation.

COOPERATION.--Water-stage recorder inspected by Monmouth Consolidated Water Co.

AVERAGE DISCHARGE.--13 years, 15.1 ft^3/s (0.428 m^3/s), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 580 ft^3/s (16.4 m^3/s) Dec. 26, 1969, gage height, 7.94 ft (2.420 m); no flow part of Aug. 20, 21, 22, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 316 ft^3/s (0.95 m^3/s) Feb. 26, gage height, 5.94 ft (1.811 m); minimum, 0.90 ft^3/s (0.03 m^3/s) Feb. 10, gage height, 1.13 ft (0.344 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	11	24	11	15	34	14	11	25	18	4.3	11
2	15	11	19	50	12	32	16	7.6	21	27	9.4	64
3	13	11	18	66	11	28	21	7.6	24	14	16	30
4	16	11	31	15	10	24	21	11	101	8.8	60	15
5	18	11	61	7.6	9.4	22	26	7.6	45	11	46	12
6	102	11	28	12	7.1	112	18	5.6	26	7.1	17	175
7	28	14	22	20	7.6	143	14	5.1	21	6.0	11	46
8	17	14	20	126	8.8	51	14	5.1	19	5.6	9.4	19
9	14	13	129	48	8.8	30	18	4.3	17	5.6	7.6	14
10	14	13	109	20	8.8	27	27	3.9	17	5.1	7.1	12
11	13	13	33	14	8.8	47	18	3.9	18	5.1	8.8	11
12	13	13	27	11	8.8	33	15	11	19	5.6	46	11
13	12	13	24	30	7.6	23	14	67	14	5.6	47	9.4
14	15	13	23	73	7.1	23	28	93	12	5.1	18	11
15	14	13	21	26	6.5	24	31	48	11	5.1	13	19
16	12	16	21	17	7.1	16	24	29	11	5.1	10	10
17	13	20	24	14	13	15	20	27	12	5.1	8.8	8.8
18	12	27	21	12	12	14	19	27	14	8.2	10	7.6
19	12	23	19	8.2	14	13	16	40	10	8.8	18	7.6
20	12	18	18	11	14	11	19	45	8.2	5.6	11	7.6
21	11	17	28	171	16	11	20	33	7.1	4.3	10	7.6
22	11	16	11	97	27	9.4	19	28	7.1	4.3	9.4	26
23	11	18	8.2	33	24	7.6	19	59	10	3.9	8.2	16
24	11	25	11	72	91	8.8	19	106	7.6	8.8	11	11
25	11	21	184	147	203	12	19	59	6.5	8.8	16	10
26	11	18	37	47	213	14	23	36	6.5	7.6	12	9.4
27	14	23	17	32	101	16	51	28	6.5	6.5	8.8	9.4
28	12	29	8.8	26	48	16	22	59	7.1	5.1	11	9.4
29	11	24	4.7	22	---	16	19	52	11	4.7	32	8.8
30	11	39	2.8	18	---	15	13	64	10	6.5	26	21
31	11	---	5.1	17	---	14	---	30	---	5.6	14	---
TOTAL	502	519	1009.6	1273.8	920.4	861.8	617	1013.7	524.6	233.6	536.8	629.6
MEAN	16.2	17.3	32.6	41.1	32.9	27.8	20.6	32.7	17.5	7.54	17.3	21.0
MAX	102	39	184	171	213	143	51	106	101	27	60	175
MIN	11	11	2.8	7.6	6.5	7.6	13	3.9	6.5	3.9	4.3	7.6

CAL YR 1978 TOTAL 7979.4 MEAN 21.9 MAX 233 MIN 2.4
WTR YR 1979 TOTAL 8641.9 MEAN 23.7 MAX 213 MIN 2.8

01407705 SHARK RIVER NEAR NEPTUNE CITY, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to current year.

COOPERATION.--Selected field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)
FEB 27...	1045	95	103	6.9	1.0	11.4	3.0	80	170
APR 23...	1340	19	146	7.0	14.0	10.2	--	50	5
MAY 25...	1020	66	98	5.6	15.0	8.4	--	2400	>2400
AUG 03...	1000	14	136	6.4	20.0	8.0	--	>24000	>2400

DATE	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
FEB 27...	17	4.8	1.3	8.9	2.8	8	--	15	14
APR 23...	36	11	2.1	11	3.4	13	--	20	19
MAY 25...	22	6.5	1.5	8.6	3.1	5	.0	16	11
AUG 03...	31	9.5	1.7	10	2.4	9	--	18	17

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHATE, TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
FEB 27...	.1	4.4	64	<1.0	1.1	.80	1.9	.80	7.1
APR 23...	.1	9.3	88	<1.0	.40	.60	1.0	.09	4.8
MAY 25...	.1	6.9	99	<1.0	.60	.30	.90	.32	--
AUG 03...	.1	9.3	106	<1.0	<.10	--	1.0	.14	9.4

DATE	TIME	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	BORON, TOTAL RECOV-ERABLE (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)
MAY 25...	1020	550	1	0	60	0	20	4

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	PHENOLS (UG/L)
MAY 25...	2800	15	40	<.5	16	0	80	0

01407760 JUMPING BROOK NEAR NEPTUNE CITY, NJ

LOCATION.--Lat 40°12'13", long 74°03'58", Monmouth County, Hydrologic Unit 02030104, on left bank 50 ft (15 m) downstream from dam on Jumping Brook Reservoir, 0.85 mi (1.37 km) upstream from mouth, and 1.4 mi (2.3 km) west of Neptune City. Water-quality samples collected at bridge 600 ft (183 m) downstream from gage at high flows.

DRAINAGE AREA.--6.43 mi^2 (16.65 km^2).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to current year.

COOPERATION.--Selected data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)
FEB 27...	1045	52	92	5.8	1.0	12.8	3.0	<20	350
APR 23...	1245	6.0	151	6.3	16.0	6.6	1.0	230	7
MAY 25...	0915	34	97	5.8	16.0	8.7	--	1700	>2400
AUG 03...	1115	7.9	128	5.9	22.0	7.8	--	>24000	>2400

DATE	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)
FEB 27...	17	5.0	1.1	8.8	1.4	5	--	15	15
APR 23...	33	9.4	2.4	12	2.2	4	--	28	21
MAY 25...	26	7.8	1.6	7.4	1.5	8	.0	16	10
AUG 03...	25	6.9	1.8	10	2.6	2	--	20	16

DATE	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	PHOSPHATE, TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
FEB 27...	.0	2.5	62	<1.0	.20	.90	1.1	.06	7.9
APR 23...	.1	5.4	97	<1.0	<.10	--	.45	.06	8.1
MAY 25...	.1	4.4	69	<1.0	.20	.60	.80	.92	20
AUG 03...	.1	6.3	103	<1.0	.30	.90	1.2	.06	9.8

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
MAY 25...	0915	190	1	0	40	0	30	8

DATE	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	PHENOLS (UG/L)
MAY 25...	8400	28	120	<.5	34	0	190	0

01407830 MANASQUAN RIVER NEAR GEORGIA, NJ

LOCATION.--Lat 40°12'36", long 74°16'41", Monmouth County, Hydrologic Unit 02040301, at bridge on Jacksons Mill Road, 0.5 mi (0.8 km) upstream from Debois Creek, 0.9 mi (1.4 km) southwest of intersection of Jacksons Mill Road with State Route 524, 1.3 mi (2.1 km) southwest of Adelphia, and 1.6 mi (2.6 km) north of Georgia.

DRAINAGE AREA.--10.6 mi^2 (27.5 km^2).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1970-74, 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)
OCT 10...	1045	263	--	11.0	--	--	--	--	59
FEB 26...	1030	80	6.4	.5	12.8	10	3500	>2400	15
APR 10...	1145	200	6.5	10.0	8.6	9.0	20	12	41
MAY 21...	1040	212	6.2	14.0	7.5	--	220	220	50
JUL 17...	1015	260	7.1	19.0	6.8	5.0	790	1600	59

DATE	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
OCT 10...	17	3.9	16	5.0	54	.0	28	20	.4
FEB 26...	4.0	1.3	5.6	2.5	7	--	13	5.9	.1
APR 10...	11	3.3	13	4.5	27	--	27	17	.2
MAY 21...	14	3.6	17	5.1	23	.0	27	19	.2
JUL 17...	17	3.9	16	5.1	17	--	26	23	.3

DATE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHATE, TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 10...	22	147	--	--	--	--	--	--	6.6
FEB 26...	5.1	56	.00	.80	.70	1.5	1.5	1.3	15
APR 10...	16	115	<1.0	2.9	1.2	4.1	--	1.2	8.5
MAY 21...	20	147	<.10	2.7	1.1	3.8	--	1.5	7.5
JUL 17...	22	161	.38	4.7	2.2	6.9	7.3	1.0	6.2

01407830 MANASQUAN RIVER NEAR GEORGIA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	NITROGEN,NH4 + ORG. TOT IN BOT MAT (MG/KG AS N)	CARBON, INORGANIC, TOT IN BOT MAT (G/KG AS C)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (G/KG AS C)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)
OCT 10...	1045	1400	4.3	5.2	20	1	0	0	--	--
MAY 21...	1040	--	--	--	20	2	--	0	60	1

DATE	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)
OCT 10...	<10	10	30	20	10	<10	8200	34000	--	20
MAY 21...	--	30	--	--	9	--	7800	--	4	--

DATE	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)	SELENIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	PHENOLS (UG/L)
OCT 10...	100	80	<.5	.00	11	20	0	30	80	3
MAY 21...	90	--	<.5	--	15	--	0	50	--	2

DATE	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIAZINON, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT 10...	0	.0	5	1.1	2.1	1.3	.0	.3	.0	.0
MAY 21...	--	--	--	--	--	--	--	--	--	--

DATE	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	MALATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	METHOXYCHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARATHION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRITHION, TOT. IN BOTTOM MATL. (UG/KG)	PARATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	TRITHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT 10...	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
MAY 21...	--	--	--	--	--	--	--	--	--	--

01407997 MARSH BOG BROOK AT SQUANKUM, NJ

LOCATION.--Lat 40°10'01", long 74°09'33", Monmouth County, Hydrologic Unit 02040301, at bridge on Squankum-Yellow Brook Road in Squankum, and 0.2 mi (0.3 km) upstream from mouth.

DRAINAGE AREA.--4.91 mi² (12.72 km²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1971-74, 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)
OCT 10...	1400	--	168	--	--	--	--	--	--
FEB 26...	1400	120	70	4.3	.0	13.4	4.0	490	920
APR 10...	1020	15	108	6.6	6.0	11.5	2.0	<20	4
MAY 21...	0915	15	95	5.2	14.0	8.7	--	230	920

DATE	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
OCT 10...	32	10	1.8	12	3.3	16	18	20	.1
FEB 26...	10	2.8	.7	5.8	1.5	0	8.5	9.6	.0
APR 10...	22	6.3	1.4	7.7	2.1	5	18	14	.1
MAY 21...	20	5.9	1.2	8.4	2.2	7	15	13	.0

DATE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN,AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHATE, TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 10...	12	95	--	--	--	--	--	--	5.3
FEB 26...	2.8	44	.00	.30	.20	.50	.50	.17	11
APR 10...	9.0	71	<1.0	.50	.90	1.4	--	1.0	6.5
MAY 21...	9.1	97	.40	.40	.90	1.3	1.7	.35	11

01407997 MARSH BOG BROOK AT SQUANKUM, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	NITROGEN,NH4 + ORG. TOT IN BOT MAT (MG/KG AS N)	CARBON, INORGANIC, TOT IN BOT MAT (G/KG AS C)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (G/KG AS C)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)
OCT												
10...	1400	590	1.9	1.9	0	<10	<10	10	<10	3000	20	<10

DATE	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIAZINON, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT												
10...	.00	<10	10	0	.0	1	.0	.0	.0	.0	.0	.0

DATE	ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	MALATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	METHOXYCHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARATHION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRITHION, TOT. IN BOTTOM MATL. (UG/KG)	PARATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	TRITHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT											
10...	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0

01408000 MANASQUAN RIVER AT SQUANKUM, NJ

LOCATION.--Lat 40°09'47", long 74°09'21", Monmouth County, Hydrologic Unit 02040301, on right bank 20 ft (6.1 m) downstream from bridge on State Highway 547 (Squankum Park Road) in Squankum, and 0.4 mi (0.6 km) downstream from Marsh Bog Brook.

DRAINAGE AREA.--43.4 mi^2 (112.4 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1931 to current year. Monthly discharge only for July 1931, published in WSP 1302.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 18.82 ft (5.736 m) National Geodetic Vertical Datum of 1929. Prior to Aug. 13, 1940, water-stage recorder at site 80 ft (24 m) upstream at same datum.

REMARKS.--Water-discharge records good.

AVERAGE DISCHARGE.--48 years, 75.8 ft^3/s (2.147 m^3/s), 23.72 in/yr (602 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,940 ft^3/s (83.3 m^3/s) Sept. 21, 1938, gage height, 12.45 ft (3.795 m), from floodmark, site then in use, from rating curve extended above 900 ft^3/s (25.5 m^3/s) on basis of contracted-opening measurement of peak flow; minimum, 12.9 ft^3/s (0.37 m^3/s) Sept. 10, 1932.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 600 ft^3/s (17.0 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage Height (ft)	Gage Height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage Height (ft)	Gage Height (m)
Jan. 22	0400	1260	35.7	8.05	2.454	Mar. 7	0330	1190	33.7	7.84	2.390
Jan. 25	0730	1300	36.8	8.20	2.499	May 24	1145	832	23.6	6.61	2.015
Feb. 26	1700	*1530	43.3	8.97	2.734	Sept. 7	Unknown	800	22.7	Unknown	

Minimum discharge, 36 ft^3/s (1.02 m^3/s) July 17, 29, Aug. 2, gage height, 2.62 ft (0.799 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	45	44	73	96	127	238	86	79	115	69	39	60
2	59	44	60	154	112	218	90	74	102	104	46	62
3	47	44	55	292	109	192	106	72	104	67	80	68
4	53	44	99	120	106	170	106	72	351	61	165	61
5	69	44	165	96	102	162	117	69	218	75	100	64
6	114	44	94	90	91	666	96	67	156	91	86	350
7	66	45	71	101	92	871	85	65	122	81	60	540
8	53	45	66	351	95	330	81	64	108	67	52	180
9	48	44	288	250	93	232	100	62	98	56	50	100
10	47	44	359	131	89	188	143	61	92	48	50	73
11	46	43	139	106	85	252	100	59	90	56	50	60
12	45	43	107	94	83	199	90	77	113	56	80	56
13	43	43	92	119	84	150	85	117	85	50	100	50
14	46	44	85	249	83	158	145	240	77	47	75	52
15	44	45	77	137	82	163	171	140	72	45	54	79
16	42	47	73	102	84	131	115	98	69	40	52	63
17	49	51	82	93	79	126	100	81	88	38	50	52
18	45	81	72	90	74	119	92	85	117	77	50	48
19	45	65	66	78	71	113	86	166	79	79	48	48
20	45	60	63	80	87	111	83	190	69	50	45	45
21	43	75	122	582	86	102	79	115	64	44	44	44
22	42	68	89	646	143	102	77	94	62	42	42	104
23	42	66	74	244	154	100	75	150	70	40	42	67
24	42	73	73	350	427	102	75	542	61	54	45	53
25	42	70	303	918	1260	128	74	340	57	50	45	49
26	43	68	176	307	1250	104	77	204	54	45	44	48
27	52	83	116	233	550	96	169	145	54	44	42	46
28	47	90	94	193	294	90	113	156	53	40	45	45
29	44	118	80	167	---	94	104	150	67	38	50	45
30	43	123	73	144	---	94	86	166	59	50	70	68
31	44	---	77	135	---	90	---	128	---	43	74	---
TOTAL	1535	1798	3463	6748	5992	5891	3006	4128	2926	1747	1875	2680
MEAN	49.5	59.9	112	218	214	190	100	133	97.5	56.4	60.5	89.3
MAX	114	123	359	918	1260	871	171	542	351	104	165	540
MIN	42	43	55	78	71	90	74	59	53	38	39	44
CFSM	1.14	1.38	2.58	5.02	4.93	4.38	2.30	3.07	2.25	1.30	1.39	2.06
IN.	1.32	1.54	2.97	5.78	5.14	5.05	2.58	3.54	2.51	1.50	1.61	2.30

CAL YR 1978 TOTAL 38075 MEAN 104 MAX 1310 MIN 38 CFSM 2.40 IN 32.63
WTR YR 1979 TOTAL 41789 MEAN 114 MAX 1260 MIN 38 CFSM 2.63 IN 35.82

Note.--No gage-geight record Aug. 4 to Sept. 18.

01408000 MANASQUAN RIVER AT SQUANKUM, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water year 1963 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: July 1969 to September 1974.
pH: July 1969 to September 1974.
WATER TEMPERATURES: July 1969 to September 1974
DISSOLVED OXYGEN: July 1969 to September 1974.

COOPERATION.--Selected field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)
OCT										
05...	1300	62	205	7.6	15.5	6.9	3.0	3500	<2400	55

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT									
05...	17	3.1	15	3.3	34	.0	24	22	.2

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHATE, TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT									
05...	12	129	.90	1.1	1.2	2.3	3.2	.45	7.3

DATE	TIME	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)
OCT							
05...	1300	140	1	0	<10	25	16000

DATE	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	PHENOLS (UG/L)
OCT						
05...	90	<.5	20	0	70	2

01408070 NORTH BRANCH METEDECONK RIVER NEAR WYCKOFF MILLS, NJ

LOCATION.--Lat 40°10'52", long 74°17'17", Monmouth County, Hydrologic Unit 02040301, at bridge on Jackson Mills Road in Wyckoff Mills, 0.4 mi (0.7 km) southwest of Georgia, 3.1 mi (4.9 km) southwest of Adelphia, and 4.0 mi (6.0 km) upstream from outflow of Aldrich Lake.

DRAINAGE AREA.--5.52 mi^2 (14.30 km^2).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)
OCT 10...	1230	--	89	--	--	--	--	--	--	27
FEB 26...	1200	138	52	4.2	.0	13.4	--	130	920	5
APR 10...	1340	18	60	4.9	8.0	9.8	1.0	50	14	10
MAY 21...	1230	14	52	3.8	14.0	7.5	--	40	34	10
JUL 17...	1130	1.6	87	6.7	20.0	7.8	1.0	330	540	34

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT 10...	9.5	.8	2.9	1.5	22	.0	8.4	6.1	.1
FEB 26...	1.5	.4	1.9	.6	0	--	7.0	3.5	.0
APR 10...	2.7	.7	3.9	.9	2	--	11	6.9	.1
MAY 21...	3.1	.5	3.5	.7	0	--	10	6.5	.0
JUL 17...	12	1.0	5.1	6.7	24	--	8.5	6.8	.1

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHATE, TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 10...	12	66	--	--	--	--	--	--	7.6
FEB 26...	1.7	30	.00	<1.0	--	.40	.40	.01	14
APR 10...	5.1	45	<1.0	<.10	--	.40	--	.12	7.2
MAY 21...	6.0	77	<1.0	<1.0	--	.60	--	.14	18
JUL 17...	12	99	<1.0	.50	3.5	4.0	--	.50	16

DATE	TIME	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)
OCT 10...	1230	110	2	0	<10	3	6900

DATE	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	PHENOLS (UG/L)
OCT 10...	30	<.5	10	0	20	0

01408120 NORTH BRANCH METEDECONK RIVER NEAR LAKEWOOD, NJ

LOCATION.--Lat 40°05'30", long 74°09'10", Ocean County, Hydrologic Unit 02040301, on upstream right bank at bridge on State Route 549, 1.0 mi (1.6 km) upstream from confluence with South Branch Metedeconk River, and 2.3 mi (3.7 km) east of Lakewood.

DRAINAGE AREA.--34.9 mi^2 (90.4 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1972 to current year.

GAGE.--Water-stage recorder. Datum of gage is 3.89 ft (1.186 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records poor.

AVERAGE DISCHARGE.--7 years, 71.3 ft^3/s (2.019 m^3/s), 27.74 in/yr (705 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,370 ft^3/s (38.7 m^3/s) Nov. 8, 1977 (gage height, 9.28 ft or 2.829 m) from rating extended above 500 ft^3/s (14.2 m^3/s); minimum, 14 ft^3/s (0.40 m^3/s) July 6, 1977, gage height, 2.35 ft (0.716 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 250 ft^3/s (7.08 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage Height (ft)	Gage Height (m)
Dec. 10	1330	298	8.44	6.50	1.981
Dec. 25	1700	289	8.18	6.45	1.966
Jan. 22	Unknown	930	26.3	Unknown	
Jan. 25	Unknown	*959	27.2	8.52	2.597
Feb. 26	Unknown	936	26.5	8.47	2.582
Mar. 7	Unknown	840	23.8	Unknown	
Sept. 7	Unknown	560	15.9	Unknown	

Minimum daily discharge, 31 ft^3/s (0.878 m^3/s) July 17, 29, Aug. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	41	42	77	87	84	143	69	64	87	55	31	51
2	58	42	65	102	104	123	72	57	80	84	37	56
3	48	42	55	194	101	105	85	54	69	54	64	60
4	46	42	69	115	98	100	85	53	132	49	90	50
5	55	42	100	77	94	93	108	52	186	60	82	68
6	114	42	99	72	73	431	89	50	144	74	66	150
7	76	42	78	93	74	565	68	50	105	64	52	350
8	50	42	63	233	76	213	65	48	76	56	48	130
9	45	41	133	166	75	147	80	47	64	47	47	100
10	43	41	281	87	72	121	95	46	59	40	46	72
11	42	40	200	98	68	168	96	44	59	46	48	61
12	41	40	124	76	67	132	82	55	67	45	63	64
13	40	40	85	110	68	110	73	88	61	42	79	50
14	44	40	68	166	67	105	96	173	53	39	68	51
15	44	40	62	91	66	108	128	168	49	37	56	61
16	41	44	59	94	68	87	120	105	47	38	53	52
17	45	47	64	75	64	84	96	68	74	31	51	48
18	45	70	63	73	59	110	79	64	108	62	50	45
19	43	66	58	63	57	90	71	95	64	64	48	40
20	43	54	55	64	70	103	66	121	55	40	48	38
21	42	48	74	387	69	94	63	119	51	35	42	38
22	41	45	79	429	95	94	62	90	50	34	40	68
23	41	45	70	162	102	93	61	85	56	32	38	76
24	41	64	66	233	284	94	59	127	49	43	38	56
25	40	58	236	610	838	118	59	197	46	40	39	47
26	41	50	222	204	831	96	63	182	43	36	43	44
27	44	54	107	155	366	77	115	137	43	35	41	41
28	46	76	86	128	196	72	117	99	43	32	55	40
29	44	71	64	111	---	76	95	101	54	31	48	40
30	43	86	59	96	---	76	77	122	47	40	58	57
31	42	---	62	90	---	72	---	105	---	35	60	---
TOTAL	1469	1496	2983	4741	4286	4100	2494	2866	2121	1420	1629	2104
MEAN	47.4	49.9	96.2	153	153	132	83.1	92.5	70.7	45.8	52.5	70.1
MAX	114	86	281	610	838	565	128	197	186	84	90	350
MIN	40	40	55	63	57	72	59	44	43	31	31	38
CFSM	1.36	1.43	2.76	4.38	4.38	3.78	2.38	2.65	2.03	1.31	1.50	2.01
IN.	1.57	1.59	3.18	5.05	4.57	4.37	2.66	3.05	2.26	1.51	1.74	2.24

CAL YR 1978 TOTAL 29014 MEAN 79.5 MAX 650 MIN 37 CFSM 2.28 IN 30.93
WTR YR 1979 TOTAL 31709 MEAN 86.9 MAX 838 MIN 31 CFSM 2.49 IN 33.80

NOTE.--No gage-height record Dec. 27 to Apr. 10, June 17 to Aug. 19.

01408500 TOMS RIVER NEAR TOMS RIVER, NJ
(National stream-quality accounting network station)

LOCATION.--Lat 39°59'10", long 74°13'29", Ocean County, Hydrologic Unit 02040301, on left bank 1.9 mi (3.1 km) downstream from Union Branch, and 2.6 mi (4.2 km) northwest of Toms River.

DRAINAGE AREA.--124 mi^2 (321 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1928 to current year. Monthly discharge only for October, November 1928, published in WSP 1302.

REVISED RECORDS.--WSP 1702: 1938. WDR-NJ-76-1: 1975(M). WDR-NJ-77-1: 1976.

GAGE.--Water-stage recorder. Datum of gage is 8.10 ft (2.469 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records excellent. Diversions by Toms River Chemical Co., 800 ft (240 m) upstream; the effluent is returned by pipeline directly into the Atlantic Ocean, thus bypassing station.

AVERAGE DISCHARGE.--51 years, 216 ft^3/s (6.117 m^3/s), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,000 ft^3/s (56.6 m^3/s) Sept. 23, 1938 (gage height, 12.50 ft or 3.810 m from floodmark), from rating curve extended above 1,500 ft^3/s (42 m^3/s); minimum, 46 ft^3/s (1.30 m^3/s) many days in August and September 1966, gage height, 2.70 ft (0.823 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,770 ft^3/s (50.1 m^3/s) Feb. 26, gage height, 11.61 ft (3.539 m); minimum, 124 ft^3/s (3.51 m^3/s) Nov. 13, gage height, 3.54 ft (1.079 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	156	140	229	246	419	916	303	302	331	180	153	323
2	161	139	231	269	378	721	294	267	312	191	147	334
3	164	137	218	338	349	617	302	245	295	195	252	443
4	164	135	212	370	332	552	333	233	339	188	401	320
5	174	142	244	394	326	506	362	226	386	187	456	264
6	207	138	262	367	294	582	337	220	422	182	599	338
7	184	137	268	323	291	830	327	210	442	175	476	404
8	174	136	258	368	282	1120	303	205	395	165	324	505
9	160	135	295	427	276	939	298	201	330	154	220	496
10	153	132	379	497	263	738	311	198	284	146	189	406
11	149	136	488	488	263	636	315	207	256	154	186	291
12	147	137	540	412	256	584	332	233	257	154	225	240
13	145	131	447	363	251	549	322	259	254	148	291	215
14	150	131	357	360	244	526	327	375	257	144	349	204
15	156	130	284	356	247	502	352	428	232	142	375	219
16	150	135	250	368	252	473	364	471	211	137	299	232
17	149	141	238	350	249	453	382	421	209	134	222	227
18	147	168	225	317	239	431	359	356	237	171	192	208
19	148	183	218	264	239	408	321	345	248	218	191	196
20	153	181	206	262	232	389	260	359	249	191	186	184
21	152	173	213	505	245	370	216	391	221	175	180	177
22	151	163	217	872	281	351	228	399	199	162	174	204
23	144	161	233	1220	313	334	237	377	204	148	166	232
24	141	169	239	867	406	334	232	368	202	155	160	243
25	139	170	366	847	714	354	227	397	193	174	155	232
26	137	166	366	1020	1350	357	229	461	183	169	163	211
27	140	163	421	908	1730	365	278	516	176	195	182	200
28	145	183	414	711	1370	353	296	473	169	191	231	188
29	150	191	349	590	---	334	330	402	169	173	251	182
30	146	222	289	513	---	320	329	373	173	161	300	196
31	141	---	254	456	---	312	---	345	---	152	342	---
TOTAL	4777	4605	9210	15648	12091	16256	9106	10263	7835	5211	8037	8114
MEAN	154	154	297	505	432	524	304	331	261	168	259	270
MAX	207	222	540	1220	1730	1120	382	516	442	218	599	505
MIN	137	130	206	246	232	312	216	198	169	134	147	177
CFSM	1.24	1.24	2.40	4.07	3.48	4.23	2.45	2.67	2.11	1.36	2.09	2.18
IN.	1.43	1.38	2.76	4.69	3.63	4.88	2.73	3.08	2.35	1.56	2.41	2.43

CAL YR 1978 TOTAL 106365 MEAN 291 MAX 1170 MIN 130 CFSM 2.35 IN 31.91
WTR YR 1979 TOTAL 111153 MEAN 305 MAX 1730 MIN 130 CFSM 2.46 IN 33.35

01408500 TOMS RIVER NEAR TOMS RIVER, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1963 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: November 1974 to current year.
WATER TEMPERATURES: November 1963 to May 1966, November 1974 to current year.

INSTRUMENTATION.--Temperature recorder November 1963 to May 1966, water-quality monitor since November 1974.

REMARKS.--Missing continuous water-quality records are the result of malfunction of the instrument.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 445 micromhos Sept. 15, 1977; minimum, 32 micromhos July 26, 1979.
WATER TEMPERATURES: Maximum, 27.5°C July 19, 1977; minimum 0.0°C on several days during winter months.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Minimum, 32 micromhos July 26.
WATER TEMPERATURES: Maximum, 25.5°C July 27, 28; minimum 0.0°C on several days during winter months.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (NTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
OCT										
12...	1145	159	60	6.1	14.5	2.0	10.4	.9	34	190
NOV										
15...	1115	133	62	5.8	12.0	2.0	11.2	1.4	15	180
DEC										
07...	1010	260	67	4.2	6.5	2.0	10.8	.9	23	180
JAN										
16...	1120	371	79	4.2	1.0	2.0	13.0	--	K1	6
FEB										
22...	1030	277	84	4.5	2.0	2.0	12.2	.5	29	140
MAR										
26...	1100	358	69	4.3	10.5	2.0	9.9	.7	9	210
APR										
23...	1150	240	65	5.2	14.5	2.0	9.8	.9	K3	340
JUN										
05...	0930	389	56	5.0	17.5	3.0	8.0	1.4	K660	4400
27...	1000	178	58	3.9	18.0	3.0	8.7	.8	K20	1100
JUL										
30...	1030	163	60	4.0	22.0	3.0	8.2	2.3	--	--
AUG										
16...	1030	310	62	--	18.0	2.0	7.9	1.2	K83	<3
SEP										
20...	1010	186	65	--	15.5	--	--	--	--	--
28...	1000	190	57	4.9	16.5	2.0	9.1	2.4	42	620

DATE	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
OCT									
12...	11	2.5	1.1	5.2	1.3	2	8.6	8.5	.0
NOV									
15...	11	2.7	1.1	5.4	1.4	2	9.1	8.6	.0
DEC									
07...	10	2.0	1.2	4.5	1.2	0	12	7.1	.1
JAN									
16...	12	2.7	1.3	6.0	.9	0	13	8.1	.0
FEB									
22...	13	3.4	1.1	5.4	1.2	0	11	10	.0
MAR									
26...	10	2.5	1.0	5.0	1.1	0	9.8	7.9	.0
APR									
23...	10	2.3	1.1	4.6	1.1	2	10	7.7	.0
JUN									
05...	8	1.9	.8	3.8	.9	1	7.5	6.4	.0
27...	9	2.1	1.0	4.7	.9	0	9.5	7.4	.0
JUL									
30...	9	2.1	1.0	5.0	1.0	0	8.5	8.0	.0
AUG									
16...	8	2.1	.7	3.2	.8	--	8.1	6.8	.0
SEP									
20...	--	--	--	--	--	--	--	--	--
28...	10	2.1	1.1	5.2	1.0	2	9.3	7.3	.0

01408500 TOMS RIVER NEAR TOMS RIVER, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)
OCT 12...	5.0	42	19	8.2	70	.49	.11	.18	.29
NOV 15...	5.1	40	13	4.7	83	.46	.18	.23	.41
DEC 07...	4.8	50	22	15	62	.22	.04	.25	.29
JAN 16...	4.1	46	18	18	80	.36	.09	.37	.46
FEB 22...	4.4	48	9	6.7	--	.53	.14	.16	.30
MAR 26...	2.5	38	13	13	29	.28	.08	.20	.28
APR 23...	2.2	39	5	3.2	53	.33	.04	.38	.42
JUN 05...	3.7	42	13	14	60	.23	.10	.62	.72
27...	4.3	42	6	2.9	76	.34	.07	.34	.41
JUL 30...	5.2	47	15	6.6	21	.38	.11	.42	.53
AUG 16...	4.8	38	43	36	7	.19	.03	.47	.50
SEP 20...	--	--	16	8.0	--	--	--	--	--
28...	5.2	36	15	7.7	42	.43	.09	.39	.48

DATE	NITRO-GEN, NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHATE, TOTAL (MG/L AS PO4)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)
OCT 12...	.00	.29	.78	.03	--	.01	4.7	--	--
NOV 15...	.12	.29	.87	.03	--	.00	--	5.4	.3
DEC 07...	.02	.27	.51	.02	--	.01	6.8	--	--
JAN 16...	.16	.30	.82	.02	--	.02	5.9	--	--
FEB 22...	.07	.23	.83	.02	--	.02	--	5.5	--
MAR 26...	.00	.28	.56	.02	--	.01	9.0	--	--
APR 23...	.16	.26	.75	.02	.06	.01	5.0	--	--
JUN 05...	.41	.31	.95	.07	.21	.01	--	11	--
27...	.07	.34	.75	.05	.15	.01	8.1	--	--
JUL 30...	.18	.35	.91	.08	--	.03	8.9	--	--
AUG 16...	.16	.34	.69	.03	--	.01	--	--	.7
SEP 20...	--	--	--	--	--	--	--	--	--
28...	.03	.45	.91	.02	--	.01	6.6	--	--

DATE	TIME	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BARIUM, SUS-PENDED RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM SUS-PENDED RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)
NOV 15...	1115	0	0	100	0	100	3	0	3	10
FEB 22...	1030	1	0	0	0	0	0	0	0	10
JUN 05...	0930	3	1	30	0	30	0	0	0	20
AUG 16...	1030	1	1	40	0	40	4	3	1	30

01408500 TOMS RIVER NEAR TOMS RIVER, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	CHRO-MIUM, SUS-PENDED RECOV. (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COBALT, SUS-PENDED RECOV-ERABLE (UG/L AS CO)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, SUS-PENDED RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, SUS-PENDED RECOV-ERABLE (UG/L AS FE)
NOV 15...	9	1	3	1	2	4	0	4	760	400
FEB 22...	10	0	1	0	1	2	1	1	440	110
JUN 05...	10	10	1	0	1	5	2	3	2100	1300
AUG 16...	0	30	3	0	3	5	2	3	1500	740

DATE	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, SUS-PENDED RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, SUS-PENDED RECOV. (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY SUS-PENDED RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)
NOV 15...	360	15	0	15	40	0	40	<.5	.0	<.5
FEB 22...	330	7	0	7	50	0	50	<.5	.0	<.5
JUN 05...	790	7	5	2	40	0	40	<.5	.0	<.5
AUG 16...	760	6	3	3	30	0	30	<.5	.0	<.5

DATE	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, SUS-PENDED TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	SILVER, SUS-PENDED RECOV-ERABLE (UG/L AS AG)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, SUS-PENDED RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
NOV 15...	0	0	0	0	0	0	30	10	20
FEB 22...	0	0	0	0	0	0	30	10	20
JUN 05...	0	0	0	0	0	0	20	0	20
AUG 16...	0	0	0	0	0	0	70	50	20

DATE	LENGTH OF EXPO-SURE (DAYS)	PERI-PHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	PERI-PHYTON BIOMASS ASH WEIGHT G/SQ M	CHLOR-A PERI-PHYTON CHROMO-GRAPHIC FLUOROM (MG/M2)	CHLOR-B PERI-PHYTON CHROMO-GRAPHIC FLUOROM (MG/M2)
NOV 15...	33	28.5	25.6	16.1	.450
FEB 22...	37	1.81	1.57	.060	.000
JUL 30...	32	11.6	9.76	8.25	1.42

01408500 TOMS RIVER NEAR TOMS RIVER, NJ--Continued

PHYTOPLANKTON ANALYSES, OCTOBER 1978 TO SEPTEMBER 1979

DATE	NOV 15,78		MAR 26,79		JUN 5,79		JUN 27,79	
TIME	1115		1100		0930		1000	
TOTAL CELLS/ML	420		500		560		77	
DIVERSITY: DIVISION	1.6		1.0		1.0		1.0	
.CLASS	1.6		1.1		1.0		1.0	
..ORDER	1.6		1.3		1.0		1.0	
...FAMILY	1.9		1.5		1.0		1.5	
....GENUS	1.9		1.6		1.0		1.5	
ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)								
.CHLOROPHYCEAE								
..CHLOROCOCCALES								
...OOCYSTACEAE								
....OOCYSTIS	--	-	--	-	52	9	--	-
..VOLVOCALES								
...CHLAMYDOMONADACEAE								
....CHLAMYDOMONAS	44	11	360*	73	--	-	39*	50
CHRYSOPHYTA								
.BACILLARIOPHYCEAE								
..CENTRALES								
...COSCINODISCACEAE								
....CYCLOTELLA	--	-	30	6	--	-	--	-
....STEPHANODISCUS	--	-	--	-	39	7	--	-
..PENNALES								
...ACHNANTHACEAE								
....ACHNANTHES	22	5	--	-	--	-	26*	33
...EUNOTIACEAE								
....EUNOTIA	22	5	15	3	--	-	--	-
...FRAGILARIACEAE								
....ASTERIONELLA	--	-	15	3	--	-	--	-
....FRAGILARIA	--	-	--	-	--	-	13*	17
....SYNEDRA	--	-	5	1	--	-	--	-
...GOMPHONEMATACEAE								
....GOMPHONEMA	22	5	--	-	--	-	--	-
...NAVICULACEAE								
....NAVICULA	--	-	25	5	--	-	--	-
...NITZSCHIACEAE								
....NITZSCHIA	--	-	5	1	--	-	--	-
.CHRYSOPHYCEAE								
..CHRYSOMONADALES								
...OCHROMONADACEAE								
....OCHROMONAS	--	-	10	2	--	-	--	-
CRYPTOPHYTA (CRYPTOMONADS)								
.CRYPTOPHYCEAE								
..CRYPTOMONADALES								
...CRYPTOCHRYSIDACEAE								
....CHROOMONAS	22	5	--	-	--	-	--	-
...CRYPTOMONADACEAE								
....CRYPTOMONAS	--	-	--	-	13	2	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)								
.CYANOPHYCEAE								
..CHROOCOCCALES								
...CHROOCOCCACEAE								
....ANACYSTIS	--	-	--	-	--	-	--	-
..HORMOGONALES								
...OSCILLATORIACEAE								
....OSCILLATORIA	270*	63	--	-	450*	81	--	-
EUGLENOPHYTA (EUGLENOIDS)								
.EUGLENOPHYCEAE								
..EUGLENALES								
...EUGLENACEAE								
....PHACUS	--	-	15	3	--	-	--	-
....TRACHELOMONAS	22	5	10	2	--	-	--	-

NOTE: * - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
- OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

01408500 TOMS RIVER NEAR TOMS RIVER, NJ--Continued
PHYTOPLANKTON ANALYSES, OCTOBER 1978 TO SEPTEMBER 1979

DATE	JUL 30,79	AUG 16,79	SEP 28,79
TIME	1030	1030	1000
TOTAL CELLS/ML	26	0	52
DIVERSITY: DIVISION	0.0	0.0	0.8
.CLASS	0.0	0.0	0.8
..ORDER	0.0	0.0	0.8
...FAMILY	1.0	0.0	1.5
....GENUS	1.0	0.0	1.5

ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
CHLOROPHYTA (GREEN ALGAE)						
.CHLOROPHYCEAE						
..CHLOROCOCCALES						
...OOCYSTACEAE						
....OOCYSTIS	--	-	--	-	--	-
..VOLVOCALES						
...CHLAMYDOMONADACEAE						
....CHLAMYDOMONAS	--	-	--	-	--	-
CHRYSOPHYTA						
.BACILLARIOPHYCEAE						
..CENTRALES						
...COSCINODISCACEAE						
....CYCLOTELLA	--	-	--	-	--	-
....STEPHANODISCUS	--	-	--	-	--	-
..PENNALES						
...ACHNANTHACEAE						
....ACHNANTHES	--	-	--	-	--	-
...EUNOTIACEAE						
....EUNOTIA	--	-	--	-	--	-
...FRAGILARIACEAE						
....ASTERIONELLA	--	-	--	-	--	-
....FRAGILARIA	--	-	--	-	13*	25
....SYNEDRA	--	-	--	-	--	-
...GOMPHONEMATACEAE						
....GOMPHONEMA	--	-	--	-	--	-
...NAVICULACEAE						
....NAVICULA	13*	50	--	-	--	-
...NITZSCHIACEAE						
....NITZSCHIA	13*	50	--	-	26*	50
.CHRYSOPHYCEAE						
..CHRYSOMONADALES						
...OCHROMONADACEAE						
....OCHROMONAS	--	-	--	-	--	-
CRYPTOPHYTA (CRYPTOMONADS)						
.CRYPTOPHYCEAE						
..CRYPTOMONADALES						
...CRYPTOCHRYSIDACEAE						
....CHROOMONAS	--	-	--	-	--	-
...CRYPTOMONADACEAE						
....CRYPTOMONAS	--	-	--	-	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)						
.CYANOPHYCEAE						
..CHROOCOCCALES						
...CHROOCOCCACEAE						
....ANACYSTIS	--	-	--	-	13*	25
..HORMOGONALES						
...OSCILLATORIACEAE						
....OSCILLATORIA	--	-	--	-	--	-
EUGLENOPHYTA (EUGLENOIDS)						
.EUGLENOPHYCEAE						
..EUGLENALES						
...EUGLENACEAE						
....PHACUS	--	-	--	-	--	-
....TRACHELOMONAS	--	-	--	-	--	-

NOTE: * - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
- OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

01408500 TOMS RIVER NEAR TOMS RIVER, NJ--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	81	54	58	86	62	65	95	69	73	85	68	76
2	66	54	58	109	62	68	76	69	72	88	65	79
3	101	54	62	104	62	71	74	69	71	64	47	56
4	68	54	57	74	63	69	86	32	61	56	47	50
5	77	55	59	77	64	70	86	61	69	54	40	48
6	84	53	58	79	64	68	110	57	71	62	44	55
7	56	53	54	124	63	74	67	62	64	60	41	54
8	57	54	55	76	65	69	92	73	78	59	40	48
9	99	54	58	81	67	74	76	68	71	42	37	39
10	242	54	65	94	66	70	68	56	61	46	37	43
11	136	54	66	80	66	72	65	54	59	51	46	48
12	231	56	66	79	67	72	59	43	54	---	---	---
13	146	55	63	80	70	74	56	43	50	---	---	---
14	57	51	54	99	69	80	69	56	62	---	---	---
15	55	52	53	73	66	68	68	61	65	---	---	---
16	301	53	78	75	67	71	67	62	65	---	---	---
17	274	56	73	89	72	78	66	50	62	---	---	---
18	75	55	61	77	63	70	69	52	57	---	---	---
19	62	57	59	74	62	66	86	53	57	---	---	---
20	67	57	59	93	65	70	64	57	59	---	---	---
21	70	58	62	104	65	75	68	58	63	---	---	---
22	64	56	59	101	70	75	65	51	59	---	---	---
23	71	56	61	74	68	71	64	52	56	---	---	---
24	64	57	59	68	37	51	61	52	55	---	---	---
25	73	60	63	66	60	63	61	54	56	---	---	---
26	68	59	61	69	62	65	56	52	54	---	---	---
27	70	59	63	73	63	68	65	48	54	---	---	---
28	75	61	64	70	61	66	54	48	50	---	---	---
29	65	60	62	71	58	64	56	48	52	---	---	---
30	63	60	62	73	46	55	62	51	56	---	---	---
31	74	61	65	---	---	---	68	61	64	---	---	---
MONTH	301	51	61	124	37	69	110	32	61	88	37	54

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1				---	---	---	100	70	72			
2				---	---	---	73	70	71			
3				---	---	---	72	70	71			
4				---	---	---	71	69	70			
5				---	---	---	71	66	69			
6				---	---	---	70	68	70			
7				---	---	---	70	68	69			
8				---	---	---	70	69	70			
9				---	---	---	70	68	69			
10				---	---	---	68	66	67			
11				---	---	---	69	66	67			
12				---	---	---	100	68	74			
13				---	---	---	69	68	68			
14				---	---	---	68	66	67			
15				---	---	---	66	65	66			
16				---	---	---	69	66	67			
17				---	---	---	102	68	70			
18				---	---	---	175	69	75			
19				---	---	---	71	69	70			
20				---	---	---	71	69	71			
21				---	---	---	117	71	73			
22				---	---	---	72	71	71			
23				---	---	---	105	70	---			
24				---	---	---	---	---	---			
25				---	---	---	---	---	---			
26				75	70	---	---	---	---			
27				74	71	72	---	---	---			
28				88	69	71	---	---	---			
29				77	70	71	---	---	---			
30				72	70	---	---	---	---			
31				72	70	71	---	---	---			
MONTH				88	69	71	175	65	70			

01408500 TOMS RIVER NEAR TOMS RIVER, NJ--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	63	62	63	115	52	59	---	---	---
2	---	---	---	90	61	65	69	52	55	---	---	---
3	---	---	---	71	61	63	55	47	50	---	---	---
4	---	---	---	61	60	61	59	49	55	---	---	---
5	65	60	---	79	60	61	61	58	59	---	---	---
6	86	61	64	69	60	62	70	58	59	---	---	---
7	65	61	62	65	60	61	112	58	61	---	---	---
8	189	62	70	62	60	61	81	56	59	---	---	---
9	73	63	67	189	61	69	117	57	62	---	---	---
10	66	63	64	68	61	63	162	56	65	---	---	---
11	81	64	66	81	61	64	120	55	60	---	---	---
12	106	63	67	73	61	64	112	51	56	---	---	---
13	69	62	63	66	61	63	81	51	56	---	---	---
14	78	61	63	134	61	66	71	52	54	---	---	---
15	68	61	63	63	61	62	66	52	54	---	---	---
16	65	63	64	113	61	65	70	53	55	---	---	---
17	66	62	63	91	60	64	77	53	55	---	---	---
18	65	61	62	219	54	70	56	52	54	---	---	---
19	93	61	63	69	56	60	55	53	54	---	---	---
20	66	60	61	68	60	61	54	52	53	---	---	---
21	82	60	64	61	58	60	54	51	53	---	---	---
22	68	61	63	59	58	59	55	52	53	---	---	---
23	69	61	63	164	58	73	55	52	53	---	---	---
24	63	62	62	83	56	60	131	52	57	67	65	---
25	182	62	68	165	56	62	55	53	54	68	64	65
26	142	62	68	341	56	83	55	53	54	102	65	68
27	145	62	70	105	53	62	65	53	---	70	66	67
28	74	62	64	63	53	55	---	---	---	71	67	68
29	137	63	67	56	52	54	---	---	---	71	67	68
30	63	62	63	69	52	51	---	---	---	69	67	68
31	---	---	---	79	52	57	---	---	---	---	---	---
MONTH	189	60	65	341	52	63	162	47	56	102	64	67
YEAR	341	32	63									

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	15.0	14.0	14.5	12.0	10.0	11.0	6.0	5.0	5.5	8.0	4.5	6.0
2	16.0	15.0	15.5	11.5	10.0	---	5.0	4.5	5.0	10.5	8.0	9.5
3	15.5	14.5	15.0	11.5	10.0	---	6.0	4.5	5.0	9.0	3.0	5.5
4	15.5	15.0	15.0	11.5	10.5	---	10.0	6.0	7.5	2.5	.5	1.0
5	15.5	14.5	15.0	12.0	10.5	11.5	10.0	8.5	9.5	1.0	.0	.5
6	16.5	15.5	16.0	13.0	11.0	12.0	8.5	7.0	8.0	1.0	.0	.5
7	16.0	14.0	15.0	13.0	12.0	---	7.0	6.5	7.0	3.5	1.0	1.5
8	14.0	12.5	13.5	---	---	---	10.5	7.0	8.5	5.5	3.5	4.5
9	12.5	11.5	12.5	---	---	---	11.0	9.0	10.0	4.0	.0	1.5
10	13.0	11.0	12.0	---	---	---	8.5	4.5	6.5	.5	.0	.0
11	13.5	12.0	13.0	8.0	10.0	---	4.5	2.0	3.0	.5	.0	.0
12	15.0	13.5	14.0	11.0	10.0	---	2.0	1.0	1.5	---	---	---
13	15.5	14.0	15.0	11.0	10.0	10.5	2.5	1.0	2.0	---	---	---
14	16.0	15.5	15.5	12.0	10.5	11.5	3.0	2.0	2.5	---	---	---
15	15.5	12.5	14.0	13.0	12.0	12.5	3.0	2.0	2.5	---	---	---
16	12.5	11.5	12.0	12.5	11.0	12.0	4.0	3.0	3.5	---	---	---
17	12.0	11.5	12.0	12.0	11.0	11.5	4.5	4.0	4.5	---	---	---
18	12.0	10.5	11.5	14.0	11.5	12.5	4.0	3.0	3.5	---	---	---
19	12.0	11.0	11.5	11.5	10.5	11.0	3.5	2.0	2.5	---	---	---
20	12.5	11.5	12.0	10.5	9.0	9.5	3.0	2.0	2.5	---	---	---
21	12.5	10.5	11.5	9.5	8.5	9.0	6.0	3.0	4.5	---	---	---
22	13.0	11.5	12.5	9.0	7.5	8.0	4.5	3.5	4.0	---	---	---
23	14.0	12.0	13.0	8.0	7.0	7.5	4.0	3.0	3.5	---	---	---
24	13.5	12.0	---	8.0	6.0	7.0	3.5	2.5	3.0	---	---	---
25	12.0	11.0	11.5	8.0	7.0	7.5	5.0	4.0	4.5	---	---	---
26	13.5	12.0	12.5	7.0	5.5	6.0	4.0	3.0	3.0	---	---	---
27	13.5	13.0	---	6.0	5.0	5.5	3.0	1.5	2.5	---	---	---
28	13.0	11.5	12.0	6.0	5.5	5.5	1.5	.5	1.0	---	---	---
29	11.5	11.0	11.0	5.5	4.5	5.0	1.0	.0	.5	---	---	---
30	11.5	10.5	11.0	6.0	4.0	5.0	1.5	.5	1.0	---	---	---
31	12.0	10.5	11.0	---	---	---	4.0	1.5	2.5	---	---	---
MONTH	16.5	10.5	13.0	14.0	4.0	9.0	11.0	.0	4.0	10.5	.0	3.0

01408500 TOMS RIVER NEAR TOMS RIVER, NJ--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1				---	---	---	15.0	14.0	---			
2				---	---	---	13.5	11.5	12.5			
3				---	---	---	11.5	11.0	11.5			
4				---	---	---	11.0	9.0	10.0			
5				---	---	---	11.0	9.0	10.0			
6				---	---	---	11.0	9.0	10.0			
7				---	---	---	9.5	8.0	8.5			
8				---	---	---	9.5	7.5	8.5			
9				---	---	---	9.0	8.5	9.0			
10				---	---	---	10.0	8.0	9.0			
11				---	---	---	11.5	9.0	10.5			
12				---	---	---	12.0	11.0	11.5			
13				---	---	---	11.5	10.0	11.0			
14				---	---	---	10.0	9.0	9.5			
15				---	---	---	10.5	9.0	10.0			
16				---	---	---	11.0	10.0	10.5			
17				---	---	---	11.0	10.5	11.0			
18				---	---	---	12.0	10.0	11.5			
19				---	---	---	13.0	11.0	12.0			
20				---	---	---	14.0	12.0	13.0			
21				---	---	---	14.0	12.0	13.0			
22				---	---	---	14.5	10.5	13.0			
23				---	---	---	16.0	13.0	---			
24				---	---	---	---	---	---			
25				---	---	---	---	---	---			
26				11.0	9.5	---	---	---	---			
27				9.0	8.0	8.5	---	---	---			
28				9.0	7.5	8.0	---	---	---			
29				10.0	8.0	9.0	---	---	---			
30				12.5	10.0	11.5	---	---	---			
31				14.5	12.0	13.0	---	---	---			
MONTH				14.5	7.5	10.0	16.0	7.5	10.5			

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	20.0	19.0	19.5	25.0	23.0	24.0	---	---	---
2	---	---	---	20.0	19.0	19.5	24.5	23.5	24.0	---	---	---
3	---	---	---	21.0	19.0	20.0	25.0	23.5	24.0	---	---	---
4	---	---	---	20.5	18.5	19.5	24.0	22.5	23.5	---	---	---
5	19.0	17.5	---	18.5	16.0	17.5	25.0	22.5	24.0	---	---	---
6	19.0	17.5	18.0	19.0	15.5	17.5	24.5	22.5	23.5	---	---	---
7	19.5	17.5	18.5	19.5	16.0	17.5	24.0	22.5	23.0	---	---	---
8	20.0	18.5	19.5	20.0	15.5	18.0	24.5	22.5	23.5	---	---	---
9	20.0	19.0	19.5	21.0	17.5	19.5	24.5	23.0	24.0	---	---	---
10	20.0	19.0	20.0	20.0	19.0	19.5	25.0	23.0	24.0	---	---	---
11	20.0	18.5	19.5	20.5	19.5	20.0	24.0	22.0	23.0	---	---	---
12	18.0	16.5	17.5	22.5	19.5	20.5	22.0	19.0	20.0	---	---	---
13	18.0	15.0	16.5	23.0	20.5	21.5	20.0	18.5	19.0	---	---	---
14	18.5	14.5	16.5	23.0	21.0	22.0	20.5	18.5	19.5	---	---	---
15	19.5	15.5	17.5	23.5	21.5	23.0	19.5	18.5	19.0	---	---	---
16	20.0	17.5	19.0	25.0	23.0	24.0	19.5	18.0	19.0	---	---	---
17	19.5	18.5	18.5	25.0	23.5	24.5	19.0	17.0	18.5	---	---	---
18	21.5	18.5	20.0	24.0	21.0	22.5	18.5	17.0	17.5	---	---	---
19	20.5	19.0	20.0	23.0	21.0	22.0	20.5	17.0	19.0	---	---	---
20	20.5	18.5	19.5	23.0	21.0	22.5	20.5	19.0	20.0	---	---	---
21	20.0	18.5	19.5	23.0	21.0	22.0	20.0	19.0	19.5	---	---	---
22	19.5	19.0	19.0	23.5	20.5	22.0	21.5	19.0	19.5	---	---	---
23	20.5	18.0	19.5	23.0	21.0	22.0	20.5	19.0	20.0	---	---	---
24	20.0	18.5	19.0	23.5	21.0	22.0	22.0	20.0	21.0	16.0	16.0	---
25	19.5	17.0	18.0	23.5	21.5	22.5	24.5	21.0	23.0	16.0	15.5	15.5
26	19.0	17.0	18.0	25.0	23.0	23.5	23.0	22.0	22.5	16.5	15.5	16.0
27	19.0	17.0	18.0	25.5	23.0	24.5	24.5	22.0	---	16.5	15.5	16.0
28	19.5	17.5	18.5	25.5	22.5	24.5	---	---	---	17.5	16.0	16.5
29	19.5	18.5	18.5	25.0	23.0	23.5	---	---	---	18.5	17.5	18.0
30	19.5	18.5	19.0	23.0	21.5	22.5	---	---	---	18.0	17.5	18.0
31	---	---	---	24.0	21.0	22.5	---	---	---	---	---	---
MONTH	21.5	14.5	18.5	25.5	15.5	21.5	25.0	17.0	21.5	18.5	15.5	16.5

01409095 OYSTER CREEK NEAR BROOKVILLE, NJ

LOCATION.--Lat 39°47'54", long 74°15'02", Ocean County, Hydrologic Unit 02040301, on left bank 100 ft (30 m) upstream from bridge on State Highway 532, 1.5 mi (2.4 km) downstream from reservoir at Wells Mill, and 3.2 mi (5.1 km) northeast of Brookville.

DRAINAGE AREA.--7.43 mi^2 (19.24 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 24.74 ft (7.541 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records fair. Flow probably contains considerable ground-water inflow from other surface drainage basins. Some minor regulation possible from small reservoirs and cranberry bogs upstream.

AVERAGE DISCHARGE.--14 years, 29.2 ft^3/s (0.827 m^3/s), 53.37 in/yr (1,356 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 284 ft^3/s (8.04 m^3/s) July 4, 1978, gage height, 7.93 ft (2.417 m); minimum, 12 ft^3/s (0.34 m^3/s) Aug. 6, 7, 1965, gage height, 3.46 ft (1.055 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 75 ft^3/s (2.12 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage Height (ft)	Gage Height (m)
Dec. 25	1815	81	2.29	5.25	1.600
Jan. 21	1645	177	5.01	6.20	1.890
Jan. 25	1000	78	2.21	5.21	1.588
Feb. 26	1230	*237	6.71	6.59	2.009
Mar. 7	0445	215	6.09	6.46	1.969

Minimum discharge, 16 ft^3/s (0.45 m^3/s) Aug. 22, gage height, 3.86 ft (1.177 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	25	40	36	42	56	42	36	38	24	25	28
2	29	25	36	40	42	52	42	35	38	23	25	28
3	28	25	35	55	41	50	43	34	38	22	28	30
4	28	25	39	46	40	48	45	34	49	22	28	34
5	28	25	44	39	40	48	49	35	56	22	42	28
6	29	25	43	38	39	85	46	34	45	21	30	36
7	28	25	37	38	40	134	43	33	41	20	29	38
8	28	25	35	53	40	70	42	33	38	20	28	29
9	28	25	38	62	40	58	42	33	37	20	26	26
10	30	25	45	45	39	54	47	33	35	20	25	24
11	25	24	40	40	39	54	45	33	36	22	25	24
12	25	24	36	38	38	55	42	36	26	22	33	24
13	25	24	35	39	39	51	41	39	26	21	42	23
14	28	24	34	50	39	50	46	54	25	21	34	24
15	28	24	33	51	39	50	54	51	25	22	28	24
16	26	25	33	42	39	48	47	42	26	24	26	23
17	26	25	34	40	38	47	43	38	27	24	25	23
18	26	26	33	39	38	62	41	37	27	30	25	23
19	26	25	33	38	39	55	40	41	26	38	27	23
20	26	24	33	38	39	47	40	48	25	30	26	26
21	26	24	36	97	39	45	40	44	27	27	20	21
22	26	24	37	83	42	44	40	39	30	26	23	27
23	25	24	35	57	44	44	39	37	26	25	36	33
24	25	26	34	50	55	44	39	37	24	33	34	29
25	25	25	65	71	146	46	38	38	23	38	29	25
26	25	24	60	57	158	45	35	39	22	32	29	23
27	26	26	43	49	87	43	50	35	22	27	28	22
28	25	32	37	46	63	42	49	34	22	26	28	22
29	25	30	37	45	---	42	40	43	22	31	29	24
30	25	34	35	43	---	42	39	43	22	32	28	47
31	24	---	35	42	---	42	---	39	---	27	28	---
TOTAL	822	764	1190	1507	1424	1653	1289	1187	924	792	889	811
MEAN	26.5	25.5	38.4	48.6	50.9	53.3	43.0	38.3	30.8	25.5	28.7	27.0
MAX	30	34	65	97	158	134	54	54	56	38	42	47
MIN	24	24	33	36	38	42	35	33	22	20	20	21
CFSM	3.57	3.43	5.17	6.54	6.85	7.17	5.79	5.16	4.15	3.43	3.86	3.63
IN.	4.11	3.82	5.96	7.54	7.13	8.28	6.45	5.94	4.63	3.96	4.45	4.06

CAL YR 1978 TOTAL 13842 MEAN 37.9 MAX 174 MIN 24 CFSM 5.10 IN 69.29
WTR YR 1979 TOTAL 13252 MEAN 36.3 MAX 158 MIN 20 CFSM 4.89 IN 66.34

01409280 WESTECUNK CREEK AT STAFFORD FORGE, NJ

LOCATION.--Lat 39°40'00", long 74°19'12", Ocean County, Hydrologic Unit 02040301, 30 ft (9 m) downstream from dam, 0.2 mi (0.3 km) south of Stafford Forge, 1.2 mi (1.9 km) downstream from Log Swamp Branch, and 2.0 mi (3.2 km) west of Staffordville.

DRAINAGE AREA.--16.0 mi² (41.4 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1973 to current year. Occasional low-flow measurements, water years 1969-73, at site 500 ft (150 m) downstream.

GAGE.--Water-stage recorder and wooden control. Datum of gage is 15.78 ft (4.810 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records fair.

AVERAGE DISCHARGE.--6 years, 35.2 ft³/s (0.997 m³/s), 29.88 in/yr (758 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 256 ft³/s (7.25 m³/s) July 4, 1978, gage height, 3.70 ft (1.128 m); no flow part of May 17, 1974, Sept. 7, 1978.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 75 ft³/s (2.04 m³/s) revised, and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage Height (ft)	Gage Height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage Height (ft)	Gage Height (m)
Jan. 22	1615	143	4.05	3.21	0.978	May 20	1900	86	2.44	2.79	0.850
Feb. 26	2230	*241	6.83	3.64	1.109	Aug. 19	2015	83	2.35	2.85	0.869
Mar. 7	1130	218	6.17	3.55	1.082	Sept. 6	2100	77	2.18	2.81	0.856

Minimum discharge, 22 ft³/s (0.623 m³/s) Aug. 9, gage height, 2.19 ft (0.668 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	29	42	38	50	90	46	44	47	31	33	32
2	29	29	38	44	45	79	47	42	45	30	30	34
3	28	29	36	52	52	71	49	41	45	29	30	35
4	28	29	40	49	49	65	51	39	56	29	35	35
5	27	30	46	44	47	62	52	40	58	29	40	35
6	27	29	45	43	40	90	50	40	47	29	30	64
7	27	29	41	43	49	196	44	39	43	28	28	71
8	27	29	37	54	46	141	43	40	40	28	26	56
9	28	29	38	58	45	98	46	40	39	28	23	46
10	28	28	40	54	43	80	49	38	38	29	22	41
11	27	29	37	47	43	77	47	36	40	31	27	38
12	26	29	35	44	42	73	46	36	38	30	35	35
13	26	29	35	45	42	68	44	40	37	29	41	33
14	28	28	33	52	41	64	50	47	35	28	35	32
15	30	28	32	50	41	62	54	50	35	28	30	31
16	30	29	32	45	42	58	52	51	35	35	28	30
17	29	29	34	42	40	57	50	49	38	33	27	29
18	28	29	33	41	39	55	46	55	38	33	26	28
19	27	29	34	42	43	54	44	62	35	35	35	28
20	28	29	34	41	42	53	45	79	33	34	35	27
21	28	28	37	81	42	51	46	75	33	32	30	23
22	28	29	36	130	46	51	44	63	35	32	31	34
23	29	29	35	95	50	51	42	57	34	31	29	40
24	29	30	36	77	73	51	41	61	33	36	29	37
25	29	30	50	90	180	52	40	65	31	37	29	34
26	29	30	47	87	218	52	41	61	31	35	28	31
27	30	32	44	71	182	50	53	57	30	35	32	30
28	29	36	36	63	114	49	55	52	30	33	35	30
29	29	36	38	60	---	50	52	51	30	31	35	34
30	29	44	36	55	---	49	47	47	31	32	34	46
31	29	---	36	51	---	47	---	46	---	33	33	---
TOTAL	875	902	1173	1788	1786	2146	1416	1543	1140	973	961	1099
MEAN	28.2	30.1	37.8	57.7	63.8	69.2	47.2	49.8	38.0	31.4	31.0	36.6
MAX	30	44	50	130	218	196	55	79	58	37	41	71
MIN	26	28	32	38	39	47	40	36	30	28	22	23
CFSM	1.76	1.88	2.36	3.61	3.99	4.33	2.95	3.11	2.38	1.96	1.94	2.29
IN.	2.03	2.10	2.73	4.16	4.15	4.99	3.29	3.59	2.65	2.26	2.23	2.56

CAL YR 1978 TOTAL 16062 MEAN 44.0 MAX 160 MIN 26 CFSM 2.75 IN 37.34
WTR YR 1979 TOTAL 15802 MEAN 43.3 MAX 218 MIN 22 CFSM 2.71 IN 36.74

01409387 MULLICA RIVER AT OUTLET OF ATSION LAKE, AT ATSION, NJ

LOCATION.--Lat 39°44'25", long 74°43'37", Burlington County, Hydrologic Unit 02040301, at bridge on U.S. Route 206 in Atsion, at outlet of Atsion Lake, and 0.2 mi (0.3 km) upstream from Wesickaman Creek.

DRAINAGE AREA.--26.7 mi² (69.2 km²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)
FEB 06...	1015	58	4.6	.0	12.7	--	<20	2	7
APR 05...	1015	49	4.5	10.0	9.8	1.0	<20	<2	6
MAY 16...	1245	47	--	18.0	6.9	1.0	<20	2	4
AUG 02...	0945	43	4.7	23.5	6.4	1.0	20	23	6

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
FEB 06...	1.8	.7	2.6	1.0	--	7.8	5.1	.0	3.8
APR 05...	1.4	.6	2.2	.6	0	8.1	4.3	.0	2.3
MAY 16...	1.1	.4	2.7	.7	--	6.8	4.3	.0	2.4
AUG 02...	1.0	.8	2.1	.7	1	6.9	8.7	.0	4.9

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHATE, TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
FEB 06...	31	<1.0	<.10	--	.60	--	--	4.0
APR 05...	30	<1.0	<.10	--	.80	--	.03	6.9
MAY 16...	46	<1.0	<.10	--	.70	--	.02	17
AUG 02...	68	.17	.30	.90	1.2	1.4	<.01	15

01409400 MULLICA RIVER NEAR BATSTO, NJ

LOCATION.--Lat 39°40'26", long 74°39'55", Atlantic County, Hydrologic Unit 02040301, on right bank 2.4 mi (3.9 km) upstream from Sleeper Branch, and 2.5 mi (4.0 km) north of Batsto.

DRAINAGE AREA.--46.1 mi² (119.4 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1957 to current year.

REVISED RECORDS.--WRD-NJ 1969: 1958(M), 1960(M), 1967-68(M).

GAGE.--Water-stage recorder. Datum of gage is 11.93 ft (3.636 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records good. Some regulation from upstream cranberry bogs and Atsion Lake. Diversions from Sleeper Branch enter river upstream of gage.

AVERAGE DISCHARGE.--22 years, 113 ft³/s (3.200 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,840 ft³/s (52.1 m³/s) Feb. 26, 1975, gage height, 6.14 ft (1.871 m); minimum, 7.0 ft³/s (0.20 m³/s) Sept. 6-8, 1966, gage height, 0.26 ft (0.085 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1840 ft³/s (52.1 m³/s) Feb. 26, gage height, 6.14 ft (1.871 m); minimum, 35 ft³/s (0.99 m³/s) Nov. 13 - 14, gage height, 0.61 ft (0.186 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	41	38	79	104	236	618	137	149	238	83	73	80
2	46	37	64	106	203	403	133	125	200	83	69	81
3	45	37	43	135	169	346	133	122	170	79	84	79
4	45	38	55	177	175	304	137	117	193	76	78	79
5	47	42	71	168	162	267	151	115	224	76	75	75
6	46	43	74	162	139	383	151	108	232	74	78	123
7	44	41	83	162	117	580	115	104	202	71	83	172
8	43	39	100	178	119	546	84	105	174	68	86	176
9	41	38	154	258	118	483	91	105	153	65	91	107
10	40	36	203	267	117	419	133	107	147	63	77	106
11	39	37	182	275	121	393	151	106	185	65	65	102
12	46	37	155	239	112	346	149	177	188	64	79	95
13	44	35	127	208	107	270	156	179	118	60	108	87
14	40	36	131	211	107	222	184	193	129	56	126	76
15	39	36	129	198	102	207	189	232	156	53	130	70
16	38	38	118	163	100	201	180	255	158	49	130	68
17	41	38	92	161	105	198	180	252	122	47	118	67
18	41	46	84	155	107	189	178	204	147	49	102	67
19	44	48	81	140	100	178	168	282	177	74	84	59
20	43	47	77	126	101	160	154	432	226	75	75	53
21	42	45	82	180	102	142	134	414	208	65	73	51
22	41	44	80	435	115	140	119	422	185	74	71	76
23	44	43	68	460	134	145	115	323	148	73	67	97
24	43	44	65	637	292	160	112	238	139	98	66	94
25	39	44	98	724	751	170	108	192	112	109	65	89
26	42	43	133	645	1630	180	108	290	97	132	68	92
27	55	46	126	530	1540	175	140	317	96	103	70	92
28	56	56	120	430	998	160	156	263	94	90	86	84
29	53	62	140	336	---	148	175	218	90	85	81	78
30	42	75	154	302	---	143	164	224	85	83	81	76
31	39	---	115	287	---	140	---	236	---	83	82	---
TOTAL	1349	1289	3283	8539	8179	8416	4285	6606	4773	2325	2619	2651
MEAN	43.5	43.0	106	275	292	271	143	213	159	75.0	84.5	88.4
MAX	56	75	203	724	1630	618	189	432	238	132	130	176
MIN	38	35	43	104	100	140	84	104	85	47	65	51

CAL YR 1978 TOTAL 49228 MEAN 135 MAX 734 MIN 35
WTR YR 1979 TOTAL 54314 MEAN 149 MAX 1630 MIN 35

393825074393500 MULLICA RIVER AT PLEASANT MILLS, NJ

LOCATION.--Lat 39°38'25", long 74°39'35", Burlington County, Hydrologic Unit 02040301, at bridge at Pleasant Mills, 0.3 mi (0.5 km) upstream from confluence with outflow from Nescochague Lake, and 0.6 mi (1.0 km) southwest of Batsto.

DRAINAGE AREA.--127 mi^2 (329 km^2).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to current year.

COOPERATION.--Field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)
FEB 06...	1240	88	4.6	.0	12.0	--	20	2
APR 05...	1140	71	4.6	10.0	9.7	1.0	50	8
MAY 16...	1050	55	--	18.0	6.9	1.0	70	5
AUG 08...	1215	47	5.4	24.0	6.7	1.0	170	540

DATE	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
FEB 06...	13	2.9	1.3	3.4	1.4	--	12	6.7	.0
APR 05...	11	2.5	1.1	3.0	1.3	--	11	5.9	.0
MAY 16...	9	2.2	.9	5.2	1.3	--	8.6	5.7	.0
AUG 08...	11	2.6	1.1	3.0	1.2	1	8.0	6.8	.1

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHATE, TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
FEB 06...	4.3	46	<1.0	<.10	--	.80	.17	4.5
APR 05...	2.2	37	<1.0	<.10	--	.60	.03	6.1
MAY 16...	2.9	46	<1.0	<.10	--	.50	.03	13
AUG 08...	5.4	48	<1.0	.20	1.0	1.2	.11	14

01409416 HAMMONTON CREEK AT WESCOATVILLE, NJ

LOCATION.--Lat 39°38'02", long 74°43'05", Atlantic County, Hydrologic Unit 02040301, at bridge on Chestnut Road in Wescoatville, 1.1 mi (1.8 km) southwest of Wesco, 1.7 mi (2.7 km) upstream from Norton Branch, and 3.8 mi (6.1 km) southwest of Batsto.

DRAINAGE AREA.--9.60 mi² (24.86 km²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1974 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
OCT 10...	1015	22	135	5.9	10.0	4.4	4.4	11	49	20	4.8	1.9
JAN 31...	1310	24	135	6.5	4.0	9.0	2.5	<2	<2	26	6.7	2.3
APR 11...	1315	22	114	6.3	11.0	9.8	4.1	--	2	22	5.5	2.0
JUN 12...	1245	53	90	5.4	21.0	4.8	2.7	540	920	21	5.2	1.9
JUL 12...	1000	27	105	5.2	21.0	2.1	2.6	33	350	19	4.5	1.9
AUG 13...	1000	50	88	4.8	17.5	3.4	4.0	130	1700	18	4.4	1.6
SEP 25...	1030	35	105	4.9	15.5	3.4	3.0	>2400	240	21	5.2	1.9

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)
OCT 10...	13	3.2	10	0	8	.0	13	15	.1	7.6	88
JAN 31...	7.4	3.1	42	0	34	--	17	11	.1	6.1	69
APR 11...	7.9	2.6	12	0	10	--	15	10	.1	4.7	65
JUN 12...	6.3	2.5	5	0	4	--	16	9.8	.1	5.0	77
JUL 12...	11	2.5	10	0	8	--	9.8	14	.1	6.1	80
AUG 13...	5.1	2.4	5	0	4	--	11	9.9	.1	5.0	77
SEP 25...	8.8	3.5	2	0	2	--	16	15	.1	6.1	69

DATE	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHATE, TOTAL (MG/L AS PO4)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 10...	3.3	.08	3.4	1.6	1.4	3.0	6.4	1.1	3.0	3.0	5.4
JAN 31...	--	--	1.9	2.3	.60	2.9	4.8	--	1.1	.91	6.0
APR 11...	--	--	2.3	1.2	.70	1.9	4.2	--	1.1	.76	7.3
JUN 12...	--	--	1.0	.20	2.1	2.3	3.3	--	.57	.28	11
JUL 12...	--	--	1.4	.40	.80	1.2	2.6	--	1.4	1.1	8.7
AUG 13...	--	--	1.2	.31	1.3	1.6	2.8	--	.93	.79	10
SEP 25...	--	--	1.6	.80	.40	1.2	2.8	--	1.4	1.0	9.8

01409416 HAMMONTON CREEK AT WESCOATVILLE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	NITROGEN,NH4 + ORG. TOT IN BOT MAT (MG/KG AS N)	CARBON, INORGANIC, TOT IN BOT MAT (G/KG AS C)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (G/KG AS C)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO)
OCT 10...	1015	1400	5.6	5.7	70	1	0	0	<10	10	<10	<10

DATE	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)	SELENIUM, TOTAL (UG/L AS SE)
OCT 10...	9	<10	180	400	20	30	<10	<.5	.00	14	<10	0

DATE	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	PHENOLS (UG/L)	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIAZINON, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL IN BOTTOM MATERIAL (U[illegible]G)
OCT 10...	40	10	0	25	.0	23	20	6.9	4.3	.0	6.7	.0

DATE	ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	MALATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	METHOXYCHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARATHION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRITHION, TOT. IN BOTTOM MATL. (UG/KG)	PARATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	TRITHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT 10...	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	0

01409500 BATSTO RIVER AT BATSTO, NJ

LOCATION.--Lat 39°38'33", long 74°39'00", Burlington County, Hydrologic Unit 02040301, on right bank 30 ft (9 m) downstream from bridge on State Highway 542 at Batsto, and 1.0 mi (1.6 km) upstream from mouth.

DRAINAGE AREA.--70.5 mi² (182.6 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1927 to current year. Monthly discharge only for April to September 1939, published in WSP 1302.

REVISED RECORDS.--WSP 781: Drainage area. WSP 1432: 1930, 1933, 1936, 1938.

GAGE.--Water-stage recorder. Concrete control since Oct. 12, 1939; prior to Mar. 24, 1939, wooden control at site 50 ft (15 m) downstream. Datum of gage is 1.4 ft (0.43 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records good except those for period of no gage-height record, which are fair. Considerable regulation at times by sluice gates prior to December 1954 and by an automatic Bascule and sluice gate since July 1959 at Batsto Lake 300 ft (91 m) upstream, capacity, about 60,000,000 gal (227,000 m³).

AVERAGE DISCHARGE.--52 years, 126 ft³/s (3.568 m³/s), 24.27 in/yr (616 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 1,310 ft³/s (37.1 m³/s) Aug. 24, 1933; maximum gage height, 8.7 ft (2.65 m) Aug. 20, 1939, from floodmark; minimum daily discharge, 5.7 ft³/s (0.16 m³/s) Oct. 4, 1959.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 1100 ft³/s (31.2 m³/s) Feb. 27; minimum daily, 11 ft³/s (0.31 m³/s) Apr. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	61	60	87	118	211	631	136	152	196	92	97	88
2	64	49	85	128	184	495	139	138	188	93	94	86
3	64	56	82	143	166	371	138	125	182	92	102	87
4	66	57	88	178	158	300	148	115	196	89	119	89
5	65	58	100	176	152	268	159	114	217	89	124	89
6	62	58	107	159	143	372	166	118	247	88	130	143
7	62	58	108	149	137	637	155	120	236	85	126	161
8	62	59	102	173	134	689	140	120	203	80	110	223
9	60	58	118	226	128	607	135	110	178	79	95	218
10	59	58	128	291	122	511	143	105	159	79	89	175
11	57	59	149	252	118	452	161	100	138	82	90	141
12	57	59	142	209	106	421	159	108	152	80	123	117
13	57	60	130	191	103	366	152	137	167	78	135	102
14	60	58	120	188	106	318	162	182	164	76	157	95
15	58	59	111	173	103	277	185	393	152	73	176	92
16	58	60	104	176	106	210	223	456	138	72	159	92
17	61	66	101	165	104	188	209	330	135	71	131	89
18	58	68	99	149	102	186	230	244	147	73	112	83
19	58	74	94	141	100	170	165	293	164	90	108	88
20	58	72	93	129	113	160	104	456	156	127	101	90
21	58	69	93	214	147	162	129	526	145	152	96	93
22	58	66	97	492	177	150	128	423	136	150	91	139
23	58	65	94	730	209	150	124	336	127	133	88	194
24	57	65	97	608	333	170	120	275	118	131	86	157
25	57	64	132	569	742	177	116	287	108	135	85	139
26	67	63	156	631	993	181	123	342	103	148	91	121
27	62	65	182	541	1100	180	154	351	100	145	92	117
28	63	76	169	444	796	170	164	294	98	147	95	117
29	67	78	151	342	---	155	170	243	94	134	90	117
30	62	85	127	234	---	140	160	222	92	114	88	148
31	60	---	116	243	---	137	---	198	---	103	85	---
TOTAL	1876	1902	3562	8562	7093	9401	4597	7413	4632	3180	3365	3690
MEAN	60.5	63.4	115	276	253	303	153	239	154	103	109	123
MAX	67	85	182	730	1100	689	230	526	247	152	176	223
MIN	57	49	82	118	100	137	104	100	92	71	85	83

CAL YR 1978 TOTAL 49264 MEAN 135 MAX 665 MIN 49
WTR YR 1979 TOTAL 59273 MEAN 162 MAX 1100 MIN 49

NOTE.--No gage-height record from Feb. 11 to Mar. 21.

01409500 BATSTO RIVER AT BATSTO, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1925, 1956, 1962-63, 1976 to current year.

COOPERATION.--Selected field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)
OCT									
04...	1030	74	29	5.4	15.0	9.0	<1.0	<20	7
FEB									
06...	1345	173	76	4.5	.0	12.8	--	<20	<2
APR									
05...	1320	157	58	4.6	10.0	9.7	<1.0	80	5
MAY									
16...	0945	473	58	--	17.0	6.8	1.0	230	14
AUG									
08...	1115	127	42	5.2	24.0	6.6	1.0	490	130

DATE	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
OCT									
04...	6	1.4	.6	2.5	.7	5	4.1	3.8	.0
FEB									
06...	13	3.1	1.3	2.3	1.0	0	11	5.0	.0
APR									
05...	9	2.1	.9	2.1	.8	0	8.9	4.5	.0
MAY									
16...	11	2.6	1.0	3.1	.8	--	8.6	4.8	.0
AUG									
08...	12	2.8	1.1	2.2	1.2	1	5.6	5.3	.0

DATE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	PHOSPHATE, TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT								
04...	5.2	27	--	1.5	.00	1.5	<.01	8.1
FEB								
06...	4.6	40	--	--	--	.30	--	3.0
APR								
05...	2.8	30	<1.0	<.10	--	.50	--	5.8
MAY								
16...	3.0	50	<1.0	<.10	--	.50	.03	14
AUG								
08...	5.9	48	<1.0	.20	1.0	1.2	.17	14

01409510 BATSTO RIVER AT PLEASANT MILLS, NJ

LOCATION.--Lat 39°37'55", long 74°38'40", Burlington County, Hydrologic Unit 02040301, on right bank, 0.5 mi (1.6 km) southeast of Pleasant Mills.

DRAINAGE AREA.--73.6 mi^2 (190.6 km^2).

PERIOD OF DAILY RECORD.--July 1958 to current year. Annual maximum only published for 1958 to 1965.

GAGE.--Water-stage recorder. Datum of gage is -8.6 ft (-2.62 m) National Geodetic Vertical Datum of 1929. Gage-height record converted to elevation above or below (-) National Geodetic Vertical Datum of 1929 for publication.

REMARKS.--Summaries for months with short periods of no gage-height record have been estimated with negligible or no loss of accuracy unless otherwise noted. Some periods cannot be estimated and are noted by dash (--) lines.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevated recorded, 7.2 ft (2.19 m) Mar. 7, 1962; minimum (1967-79), -0.40 ft (-0.122 m) Oct 18, 1970.

EXTREMES FOR CURRENT YEAR.--Maximum elevation recorded, 4.64 ft (1.414 m) Jan. 24; minimum, -0.35 ft (-0.10 m) Mar. 20.

Summaries of tide elevations during year are as follows:

TIDE ELEVATIONS, IN FEET, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

		OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Maximum	Elevation	3.38	3.55	3.52	4.64	--	3.56	3.84	3.42	--	--	--	--
high tide	Date	04	17	25	24	--	24	27	20	--	--	--	--
Minimum	Elevation	-0.10	-0.11	0.24	0.46	--	-0.35	0.22	0.27	--	--	--	--
low tide	Date	11	03	03	02	--	20	21	10	--	--	--	--
Mean high tide		2.61	2.70	2.09	--	--	1.94	2.61	2.72	--	--	--	--
Mean water level		1.46	1.54	1.37	--	--	1.24	1.70	1.90	--	--	--	--
Mean low tide		0.23	0.16	0.55	--	--	0.61	0.78	1.10	--	--	--	--

NOTE.--Missing or doubtful gage-height record Dec. 17-19, Jan. 10-13, 18, 20, Feb. 5-28, June 15 to Sept. 30.

01409535 MULLICA RIVER AT GREEN BANK, NJ

LOCATION.--Lat 39°36'43", long 74°35'22", Burlington County, Hydrologic Unit 02040301, at bridge on State Highway 563 in Green Bank, 0.2 mi (0.4 km) downstream of Little Bull Creek, 1.6 mi (2.6 km) west of Lower Bank Church, 1.6 mi (2.6 km) northeast of Weekstown, and 4.6 mi (7.4 km) southwest of Maxwell.

DRAINAGE AREA.--243 mi² (629 km²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1977 to 1979 (discontinued).

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)
OCT 04...	1130	2600	6.5	17.0	8.0	<1.0	760	200

DATE	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT 04...	300	20	60	560	22	8	130	890	.1

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHATE, TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 04...	5.0	1810	<1.0	.70	.80	1.5	.15	6.6

01409810 WEST BRANCH WADING RIVER NEAR JENKINS, NJ

LOCATION.--Lat 39°41'17", long 74°32'54", Burlington County, Hydrologic Unit 02040301, on right bank 900 ft (274 m) downstream from Godfrey Bridge, 2.2 mi (3.5 km) downstream from Little Hospitality Brook, and 1.2 mi (1.9 km) southwest of Jenkins.

DRAINAGE AREA.--84.1 mi² (217.8 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1974 to current year.

REVISED RECORDS.--WDR-NJ-77-1: 1976.

GAGE.--Water-stage recorder. Datum of gage is 29.09 ft (8.87 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records good. Some regulation by cranberry bogs and small ponds.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,140 ft³/s (32.3 m³/s) Aug. 14, 1978, gage height, 15.75 ft (4.801 m); minimum, 22 ft³/s (0.62 m³/s) July 24, 1977, gage height 10.16 ft (3.097 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,320 ft³/s (37.4 m³/s) Feb. 26, gage height, 16.14 ft (4.919 m); minimum, 55 ft³/s (1.56 m³/s) Oct. 15, gage height, 10.65 ft (3.246 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	105	78	88	130	264	802	187	183	215	105	98	94
2	91	71	83	155	211	629	171	167	215	99	88	98
3	82	64	72	258	209	471	168	161	208	96	113	115
4	103	66	91	233	198	381	182	166	292	85	112	115
5	98	73	120	187	189	342	233	195	381	87	109	117
6	92	75	112	172	157	474	222	165	344	85	103	288
7	80	70	94	178	160	809	195	136	309	86	96	461
8	71	71	87	309	163	875	167	136	304	80	91	405
9	63	70	115	402	156	771	183	122	283	76	88	272
10	71	67	173	385	150	648	215	174	236	75	80	199
11	91	65	177	327	142	577	209	238	208	89	89	148
12	111	65	155	261	134	536	195	221	216	85	123	122
13	78	62	135	242	131	466	202	261	167	82	171	114
14	67	58	121	298	134	405	262	574	157	79	161	116
15	58	59	111	278	131	352	344	657	172	73	144	91
16	65	75	104	228	135	267	309	542	145	67	125	84
17	68	64	106	205	132	238	282	360	135	68	111	77
18	72	73	100	177	131	236	253	311	141	73	101	72
19	82	65	93	135	128	216	228	436	129	108	111	76
20	81	63	91	147	144	203	177	750	119	132	99	78
21	83	62	108	497	185	205	163	747	115	123	93	80
22	113	60	106	820	225	221	145	557	110	106	91	120
23	118	57	95	831	265	191	130	405	123	109	84	168
24	97	60	95	710	421	196	127	352	126	239	83	136
25	66	60	239	886	945	253	125	383	116	385	82	120
26	71	57	259	842	1250	251	119	379	104	396	94	105
27	80	65	225	703	1260	231	208	327	108	329	94	101
28	76	97	169	571	1010	213	227	280	104	212	123	101
29	66	83	152	482	---	200	225	264	96	144	127	101
30	63	125	136	385	---	211	206	219	97	123	110	128
31	72	---	131	304	---	189	---	227	---	108	101	---
TOTAL	2534	2080	3943	11738	8760	12059	6059	10095	5475	4004	3295	4302
MEAN	81.7	69.3	127	379	313	389	202	326	183	129	106	143
MAX	118	125	259	886	1260	875	344	750	381	396	171	461
MIN	58	57	72	130	128	189	119	122	96	67	80	72
CFSM	.97	.82	1.51	4.51	3.72	4.63	2.40	3.88	2.18	1.53	1.26	1.70
IN.	1.12	.92	1.74	5.19	3.87	5.33	2.68	4.47	2.42	1.77	1.46	1.90

CAL YR 1978 TOTAL 71790 MEAN 197 MAX 1100 MIN 57 CFSM 2.34 IN 31.75
WTR YR 1979 TOTAL 74344 MEAN 204 MAX 1260 MIN 57 CFSM 2.43 IN 32.88

01409810 WEST BRANCH WADING RIVER NEAR JENKINS, NJ--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	40	32	36	---	---	---	---	---	---	---	---	---
2	38	35	37	---	---	---	---	---	---	---	---	---
3	36	30	34	---	---	---	34	31	33	---	---	---
4	37	33	35	---	---	---	39	29	32	---	---	---
5	35	27	33	---	---	---	44	39	40	---	---	---
6	37	32	35	---	---	---	60	56	---	---	---	---
7	35	30	33	---	---	---	51	45	48	---	---	---
8	32	28	31	---	---	---	47	43	45	---	---	---
9	32	27	29	35	33	---	51	44	48	---	---	---
10	32	26	30	35	33	---	56	51	54	---	---	---
11	54	34	46	---	---	---	---	---	---	---	---	---
12	55	50	53	---	---	---	---	---	---	---	---	---
13	55	46	50	---	---	---	---	---	---	---	---	---
14	47	44	46	---	---	---	---	---	---	---	---	---
15	---	---	---	31	30	31	---	---	---	---	---	---
16	---	---	---	34	30	32	---	---	---	---	---	---
17	---	---	---	30	29	---	---	---	---	---	---	---
18	---	---	---	34	29	---	---	---	---	---	---	---
19	---	---	---	33	31	32	---	---	---	---	---	---
20	---	---	---	32	30	---	---	---	---	---	---	---
21	---	---	---	29	28	---	---	---	---	---	---	---
22	---	---	---	30	28	29	---	---	---	---	---	---
23	---	---	---	28	27	27	---	---	---	67	65	---
24	---	---	---	28	26	27	---	---	---	67	57	62
25	---	---	---	28	27	27	---	---	---	68	60	65
26	---	---	---	26	25	26	---	---	---	68	65	66
27	---	---	---	26	25	---	---	---	---	68	64	66
28	---	---	---	32	27	30	---	---	---	68	63	65
29	---	---	---	31	29	30	---	---	---	66	63	64
30	---	---	---	38	32	35	---	---	---	66	63	64
31	---	---	---	---	---	---	---	---	---	64	63	64
MONTH	55	26	38	38	25	30	60	29	43	68	57	65

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	64	62	63	---	---	---	53	51	52	51	49	50
2	62	60	61	---	---	---	52	50	51	50	47	49
3	62	60	61	---	---	---	52	51	51	50	47	48
4	61	56	60	---	---	---	52	51	51	50	47	48
5	61	59	60	---	---	---	54	51	52	50	49	50
6	60	59	59	---	---	---	54	52	53	50	46	48
7	59	57	58	---	---	---	53	51	52	48	45	47
8	59	55	57	---	---	---	52	50	51	47	45	46
9	59	56	58	---	---	---	51	50	50	47	42	45
10	59	56	57	---	---	---	53	50	51	48	46	47
11	59	57	58	---	---	---	53	51	52	48	46	47
12	59	57	58	---	---	---	53	52	53	47	46	46
13	59	56	57	58	57	---	53	52	52	49	44	46
14	59	56	57	58	56	57	55	51	53	56	50	53
15	57	53	55	58	56	57	56	54	55	57	55	56
16	57	54	56	56	52	54	56	55	55	57	55	56
17	58	54	56	53	51	52	55	54	55	57	54	55
18	---	---	---	53	52	53	55	53	54	55	52	53
19	---	---	---	53	51	52	54	52	53	55	51	52
20	---	---	---	52	50	51	54	51	53	55	52	54
21	---	---	---	51	49	50	53	50	52	55	54	55
22	---	---	---	51	48	50	53	50	51	55	53	54
23	---	---	---	51	48	50	51	49	50	54	51	52
24	---	---	---	52	49	50	51	49	50	52	50	51
25	---	---	---	55	52	53	51	47	49	53	50	51
26	---	---	---	55	53	54	48	47	48	52	50	51
27	---	---	---	53	51	52	52	48	50	51	48	49
28	---	---	---	52	50	51	52	50	51	49	47	48
29	---	---	---	51	49	50	52	50	51	49	45	47
30	---	---	---	52	50	51	52	49	51	48	43	45
31	---	---	---	52	50	51	---	---	---	47	43	45
MONTH	64	53	58	58	48	52	56	47	52	57	42	50

01409810 WEST BRANCH WADING RIVER NEAR JENKINS, NJ--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	45	43	44	40	38	39	27	25	26			
2	45	43	44	39	37	38	28	25	26			
3	44	42	43	39	37	38	30	27	29			
4	47	44	45	38	35	37	29	27	29			
5	47	44	45	37	34	36	29	27	28			
6	47	45	46	38	34	36	28	27	28			
7	47	43	45	40	37	38	28	26	27			
8	47	44	46	40	38	39	27	26	27			
9	47	44	46	39	37	38	27	26	26			
10	46	44	45	39	37	38	28	25	26			
11	45	43	44	40	37	38	28	25	27			
12	44	40	42	41	37	40	31	27	29			
13	43	39	41	41	35	38	36	31	34			
14	44	39	42	39	37	38	36	34	36			
15	44	41	42	40	36	38	36	33	35			
16	42	40	41	41	38	40	34	30	31			
17	42	39	40	39	39	---	30	28	29			
18	42	37	39	45	40	42	29	26	27			
19	41	39	40	42	40	41	27	25	---			
20	41	37	39	---	---	---	---	---	---			
21	40	37	39	---	---	---	---	---	---			
22	39	38	39	---	---	---	---	---	---			
23	40	38	39	---	---	---	---	---	---			
24	40	39	39	---	---	---	---	---	---			
25	38	36	37	---	---	---	---	---	---			
26	38	36	37	41	37	---	---	---	---			
27	39	37	---	47	35	35	---	---	---			
28	39	37	38	45	31	33	---	---	---			
29	39	37	38	31	29	30	---	---	---			
30	40	38	39	30	28	29	---	---	---			
31	---	---	---	28	26	27	---	---	---			
MONTH	47	36	42	47	26	37	36	25	29			

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	16.0	13.5	15.0	---	---	---	---	---	---	---	---	---
2	18.0	15.5	16.5	---	---	---	---	---	---	---	---	---
3	16.0	14.0	15.5	---	---	---	6.5	4.0	5.0	---	---	---
4	16.0	14.5	15.5	---	---	---	10.5	6.5	8.5	---	---	---
5	17.0	14.0	15.5	---	---	---	10.0	8.5	9.0	---	---	---
6	19.0	16.0	17.5	---	---	---	---	---	---	---	---	---
7	16.5	14.0	15.0	---	---	---	---	---	---	---	---	---
8	14.0	12.0	13.5	---	---	---	---	---	---	---	---	---
9	14.0	11.0	12.5	10.5	9.5	---	---	---	---	---	---	---
10	14.5	10.5	13.0	9.5	9.0	---	---	---	---	---	---	---
11	15.5	10.0	13.5	---	---	---	---	---	---	---	---	---
12	18.0	14.5	16.5	---	---	---	---	---	---	---	---	---
13	19.5	14.0	17.0	---	---	---	---	---	---	---	---	---
14	19.0	15.5	17.5	---	---	---	---	---	---	---	---	---
15	---	---	---	12.5	11.5	11.5	---	---	---	---	---	---
16	---	---	---	11.5	10.0	11.0	---	---	---	---	---	---
17	---	---	---	11.0	9.5	10.0	---	---	---	---	---	---
18	---	---	---	13.5	11.0	12.5	---	---	---	---	---	---
19	---	---	---	11.5	9.0	9.5	---	---	---	---	---	---
20	---	---	---	9.0	7.5	---	---	---	---	---	---	---
21	---	---	---	8.0	8.0	---	---	---	---	---	---	---
22	---	---	---	8.0	7.5	7.5	---	---	---	---	---	---
23	---	---	---	8.0	7.0	7.5	---	---	---	2.0	1.0	---
24	---	---	---	9.0	8.0	9.0	---	---	---	6.0	2.0	3.5
25	---	---	---	8.5	7.0	7.5	---	---	---	6.0	4.0	5.5
26	---	---	---	7.0	5.0	6.0	---	---	---	4.0	3.0	3.5
27	---	---	---	5.0	4.0	4.5	---	---	---	4.0	3.0	3.5
28	---	---	---	5.0	4.5	4.5	---	---	---	4.0	2.0	2.5
29	---	---	---	5.5	4.0	4.5	---	---	---	3.5	2.0	3.0
30	---	---	---	6.0	4.5	5.0	---	---	---	4.0	2.5	3.0
31	---	---	---	---	---	---	---	---	---	3.5	2.0	2.5
MONTH	19.5	10.0	15.5	13.5	4.0	8.0	10.5	4.0	7.5	6.0	1.0	3.5

MULLICA RIVER BASIN

01409810 WEST BRANCH WADING RIVER NEAR JENKINS, NJ--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	2.0	.5	1.5	---	---	---	17.0	15.0	16.0	18.0	14.5	16.5
2	2.0	.0	.5	---	---	---	15.0	12.5	13.0	17.0	13.5	15.0
3	1.5	.0	---	---	---	---	12.0	11.5	11.5	17.0	13.5	15.5
4	2.0	.0	1.5	---	---	---	11.5	9.5	10.0	18.5	15.5	17.0
5	1.5	.0	.5	---	---	---	12.0	8.5	10.0	18.0	15.5	17.0
6	.5	.0	---	---	---	---	11.5	9.0	10.0	17.5	13.5	15.5
7	.5	.0	.0	---	---	---	10.0	7.0	8.5	18.5	14.0	16.5
8	1.5	.0	.5	---	---	---	10.0	7.0	8.5	20.0	15.5	18.0
9	1.0	.0	---	---	---	---	9.5	8.5	9.0	22.5	17.5	20.0
10	.0	.0	.0	---	---	---	11.5	7.5	9.5	23.0	20.0	21.5
11	.0	.0	.0	---	---	---	12.5	8.0	10.5	24.5	21.0	22.5
12	.0	.0	.0	---	---	---	12.5	11.0	11.5	22.0	18.5	20.0
13	.0	.0	.0	7.0	4.5	---	12.0	10.0	11.5	19.0	18.0	18.5
14	.0	.0	.0	9.5	7.0	8.0	10.0	9.0	9.5	18.5	17.5	18.0
15	1.5	.0	.5	8.5	5.5	7.0	11.5	8.5	10.0	19.0	16.5	17.5
16	.5	.0	.5	6.0	3.5	4.5	11.0	10.0	10.5	20.0	17.0	18.5
17	.5	.0	---	7.5	4.0	6.0	11.0	9.5	10.5	18.5	16.5	17.5
18	---	---	---	9.5	7.0	8.0	13.0	9.0	11.0	17.5	15.5	16.0
19	---	---	---	9.0	6.5	7.5	14.0	10.0	12.0	15.0	14.5	15.0
20	---	---	---	10.0	7.0	8.5	14.5	10.5	12.5	16.0	14.5	15.0
21	---	---	---	11.0	8.0	9.5	15.0	11.0	13.0	17.5	15.0	16.5
22	---	---	---	12.0	8.5	10.0	15.0	12.0	13.5	18.0	17.0	17.5
23	---	---	---	13.0	9.5	11.0	17.5	13.5	15.5	19.0	17.0	18.0
24	---	---	---	11.5	11.0	11.5	16.5	14.0	15.0	20.5	18.0	19.0
25	---	---	---	12.5	10.0	11.0	17.0	14.5	15.5	20.5	18.5	19.0
26	---	---	---	11.0	8.5	9.5	16.5	15.0	15.5	19.0	17.0	18.0
27	---	---	---	9.0	7.0	8.0	16.5	14.5	15.5	17.5	15.0	16.5
28	---	---	---	9.5	6.5	8.0	15.5	14.0	14.5	18.0	16.5	17.0
29	---	---	---	11.5	8.0	9.5	17.5	13.0	15.0	19.5	15.5	17.5
30	---	---	---	14.5	11.0	13.0	18.0	13.5	16.0	20.5	17.0	18.5
31	---	---	---	17.0	13.5	15.5	---	---	---	20.0	18.0	19.0
MONTH	2.0	.0	.5	17.0	3.5	9.0	18.0	7.0	12.0	24.5	13.5	17.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	20.0	19.0	19.5	22.5	20.5	21.5	26.5	23.5	25.0	24.0	21.5	22.5
2	21.0	19.0	19.5	21.5	20.0	21.0	26.5	24.0	25.0	22.5	21.0	22.0
3	19.0	17.5	18.5	23.0	19.5	21.0	26.0	24.0	25.0	23.5	21.5	22.5
4	17.5	17.0	17.0	21.5	19.0	20.0	26.0	24.0	25.0	24.0	22.0	23.0
5	22.0	17.5	19.5	19.5	17.0	18.5	26.5	23.5	25.0	24.0	22.5	23.0
6	22.5	20.0	21.5	19.5	16.0	18.0	26.0	24.0	25.0	24.0	23.5	23.5
7	24.0	20.5	22.5	20.0	16.5	18.5	25.5	23.0	24.0	24.5	22.5	23.5
8	24.5	22.0	23.0	21.0	17.5	19.5	26.0	23.0	24.5	23.0	21.5	22.5
9	24.0	22.0	23.0	21.5	18.0	20.0	25.5	23.0	24.0	21.5	19.5	21.0
10	24.5	22.0	23.0	20.5	18.5	19.5	25.5	22.5	24.0	20.5	18.0	19.0
11	23.0	20.0	21.5	22.0	19.0	20.5	24.5	22.5	23.5	20.5	18.5	19.5
12	20.5	17.5	19.0	23.0	20.0	21.5	22.5	18.5	20.5	21.0	18.0	19.5
13	20.5	17.0	19.0	24.5	21.0	22.5	20.5	18.0	19.0	20.5	17.5	19.0
14	21.0	17.0	19.0	24.5	22.5	23.5	22.5	18.5	20.5	22.0	19.5	---
15	22.0	18.5	20.0	25.5	22.0	24.0	21.5	19.5	20.5	---	---	---
16	22.5	19.5	21.0	25.5	23.0	24.0	20.5	18.0	19.5	---	---	---
17	21.0	19.5	20.5	24.5	22.5	23.5	20.0	17.0	18.5	---	---	---
18	23.5	19.5	21.0	22.5	19.5	21.5	18.5	17.5	18.0	---	---	---
19	22.5	20.5	21.5	21.5	18.5	20.0	21.0	17.5	19.0	---	---	---
20	22.5	18.5	20.5	---	---	---	22.0	19.0	20.5	---	---	---
21	22.0	19.0	20.5	---	---	---	21.0	19.5	20.0	---	---	---
22	21.0	19.0	20.0	---	---	---	21.0	18.5	19.5	---	---	---
23	23.0	19.0	21.0	---	---	---	21.0	18.0	19.5	---	---	---
24	22.0	19.5	21.0	---	---	---	22.5	19.5	21.0	---	---	---
25	21.5	17.5	19.5	---	---	---	24.0	21.0	22.5	---	---	---
26	21.5	17.5	19.5	27.0	26.0	---	23.0	21.5	22.5	---	---	---
27	22.0	18.0	19.5	27.0	25.5	26.0	24.0	21.0	22.5	---	---	---
28	21.0	19.0	20.0	26.5	24.5	25.5	22.5	21.5	22.0	---	---	---
29	21.5	19.0	20.0	26.0	25.0	25.5	24.0	20.5	22.5	---	---	---
30	22.0	20.0	21.0	25.5	24.0	24.5	24.5	22.0	23.5	---	---	---
31	---	---	---	26.0	23.5	24.5	24.5	22.0	23.5	---	---	---
MONTH	24.5	17.0	20.5	27.0	16.0	22.0	26.5	17.0	22.0	24.5	17.5	21.5

01409815 WEST BRANCH WADING RIVER AT MAXWELL, NJ
(National stream-quality accounting network station)

LOCATION.--Lat 39°40'30", long 74°32'28", Burlington County, Hydrologic Unit 02040301, at bridge on State Highway 563 in Maxwell, 1.6 mi (2.6 km) southeast of Washington, 1.8 mi (2.9 km) southwest of Jenkins, and 2.2 mi (3.5 km) upstream from confluence with Oswego River.

DRAINAGE AREA.--85.9 mi² (222.5 km²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to current year.

REMARKS.--Water-stage recorder and water-quality monitor located at station 01409810.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (NTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
OCT 11...	1100	E91	33	4.8	11.5	4.0	9.0	.9	46	34	4	.7
NOV 09...	1300	--	31	4.3	10.0	3.0	10.0	.2	K2	K1	3	.7
DEC 06...	1315	E104	46	4.1	7.0	4.0	10.1	.8	K12	27	5	.9
JAN 17...	1145	E203	60	3.8	1.0	3.0	12.4	.8	<1	K3	5	1.1
23...	1215	E868	62	--	1.5	--	--	--	--	--	--	--
FEB 23...	1045	E259	52	4.1	1.0	4.0	11.8	.6	<1	19	4	.8
MAR 13...	1020	E469	--	--	5.0	--	--	--	--	--	--	--
27...	1000	E231	46	4.1	7.0	2.0	9.8	.8	K1	160	3	.7
APR 25...	1000	E125	42	4.4	14.5	3.0	8.4	.9	K1	410	3	.6
JUN 04...	0940	E277	40	4.2	17.0	3.0	7.4	--	110	1600	3	.6
26...	1100	E103	35	3.3	17.5	4.0	7.7	1.0	21	460	3	.6
JUL 26...	1030	E405	31	3.0	25.0	4.0	4.8	1.4	77	K120	3	.6
AUG 07...	1030	E98	35	3.4	22.5	4.0	6.5	.8	K13	860	3	.5
SEP 05...	1030	E111	36	3.4	22.5	4.0	6.9	1.1	26	250	2	.5

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SEDIMENT, SUSPENDED (MG/L)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)
OCT 11...	.5	2.2	.7	1	4.2	3.8	.0	4.8	26	16	97	.00
NOV 09...	.4	2.2	.8	0	3.5	3.5	.0	5.7	26	--	--	.00
DEC 06...	.7	3.5	.8	0	7.1	4.2	.0	5.5	30	28	86	.03
JAN 17...	.5	2.2	.4	0	6.7	3.6	.0	4.2	26	11	83	.01
23...	--	--	--	--	--	--	--	--	--	1	--	--
FEB 23...	.4	2.1	1.0	0	5.9	4.0	.0	4.1	27	6	--	.14
MAR 13...	--	--	--	--	--	--	--	--	--	5	--	--
27...	.3	1.9	.4	0	6.8	3.9	.0	2.7	28	3	81	.00
APR 25...	.4	1.9	.4	0	5.0	3.3	.0	3.2	21	4	75	.00
JUN 04...	.3	1.6	.2	0	5.1	3.5	.0	3.6	38	16	46	.05
26...	.4	2.0	.4	0	4.5	3.9	.0	4.9	26	12	52	.03
JUL 26...	.4	1.7	1.4	0	7.4	3.6	.0	4.2	25	11	52	.00
AUG 07...	.4	1.8	.4	0	3.4	4.0	.0	5.5	27	7	63	.00
SEP 05...	.3	2.0	.4	0	2.7	3.5	.0	5.1	18	8	64	.02

01409815 WEST BRANCH WADING RIVER AT MAXWELL, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHATE, TOTAL (MG/L AS PO4)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)
OCT 11...	.02	.19	.21	.00	.21	.21	.02	--	.00	6.2	--	--
NOV 09...	.03	.13	.16	.00	.16	.16	.01	--	.00	--	6.6	1.0
DEC 06...	.03	.26	.29	.12	.17	.32	.01	--	.00	6.5	--	--
JAN 17...	.00	.00	.00	.00	.00	.01	.00	--	.00	5.2	--	--
23...	--	--	--	--	--	--	--	--	--	--	--	--
FEB 23...	.01	.13	.14	.00	.14	.28	.01	--	.00	--	3.0	--
MAR 13...	--	--	--	--	--	--	--	--	--	--	--	--
27...	.00	.15	.15	.00	.15	.15	.01	--	.01	5.7	--	--
APR 25...	.00	.12	.12	.00	.12	.12	.00	.00	.00	5.5	--	--
JUN 04...	.02	.64	.66	.20	.66	.71	.03	.09	.00	--	16	3.5
26...	.03	.35	.38	.13	.25	.41	.03	.09	.00	15	--	--
JUL 26...	.00	.56	.56	.44	.12	.56	.03	--	.00	11	--	--
AUG 07...	.02	.71	.73	.50	.23	.73	.04	--	.02	--	--	3.8
SEP 05...	.08	.57	.65	.36	.29	.67	.03	--	.00	13	--	--

DATE	TIME	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BARIUM, SUS-PENDED RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM SUS-PENDED RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)
NOV 09...	1300	1	1	0	0	0	0	0	0	<10
FEB 23...	1045	1	1	100	100	0	1	0	1	10
JUN 04...	0940	4	2	20	0	20	1	1	0	30
AUG 07...	1030	2	2	20	0	20	1	0	1	20

DATE	CHRO-MIUM, SUS-PENDED RECOV. (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COBALT, SUS-PENDED RECOV-ERABLE (UG/L AS CO)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, SUS-PENDED RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, SUS-PENDED RECOV-ERABLE (UG/L AS FE)
NOV 09...	<10	0	1	0	1	3	0	3	1700	1200
FEB 23...	10	0	0	0	0	28	27	1	1200	610
JUN 04...	10	20	2	2	0	6	4	2	4200	3500
AUG 07...	10	10	1	0	1	6	4	2	5200	4800

DATE	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, SUS-PENDED RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, SUS-PENDED RECOV. (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY SUS-PENDED RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)
NOV 09...	540	--	0	--	10	0	10	<.5	.0	<.5
FEB 23...	590	6	0	6	30	0	30	<.5	.0	<.5
JUN 04...	750	12	8	4	30	0	30	<.5	.0	<.5
AUG 07...	430	8	7	1	10	0	10	<.5	.0	<.5

01409815 WEST BRANCH WADING RIVER AT MAXWELL, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, SUS-PENDED TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	SILVER, SUS-PENDED RECOV-ERABLE (UG/L AS AG)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, SUS-PENDED RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
NOV 09...	0	0	0	0	0	0	30	10	20
FEB 23...	0	0	0	0	0	0	20	0	20
JUN 04...	0	0	0	0	0	0	40	20	20
AUG 07...	0	0	0	0	0	0	30	20	10

DATE	LENGTH OF EXPO-SURE (DAYS)	PERI-PHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	PERI-PHYTON BIOMASS ASH WEIGHT G/SQ M	CHLOR-A PERI-PHYTON CHROMO-GRAPHIC FLUOROM (MG/M2)	CHLOR-B PERI-PHYTON CHROMO-GRAPHIC FLUOROM (MG/M2)
NOV 09...	28	.472	.236	.350	.000
MAR 27...	31	.550	.240	.670	.170

01409815 WEST BRANCH WADING RIVER AT MAXWELL, NJ--Continued

PHYTOPLANKTON ANALYSES, OCTOBER 1978 TO SEPTEMBER 1979

DATE TIME	NOV 9,78 1300	MAR 27,79 1000	JUN 4,79 0940	JUN 26,79 1100
TOTAL CELLS/ML	87	87	26	26
DIVERSITY: DIVISION	0.0	1.2	0.0	1.0
.CLASS	0.0	1.2	0.0	1.0
..ORDER	0.0	1.2	0.0	1.0
...FAMILY	0.0	1.2	0.0	1.0
....GENUS	0.0	1.2	0.0	1.0

ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
CHLOROPHYTA (GREEN ALGAE)								
.CHLOROPHYCEAE								
..VOLVOCALES								
...CHLAMYDOMONADACEAE								
....CHLAMYDOMONAS	--	-	25*	29	--	-	--	-
CHRYSOPHYTA								
.BACILLARIOPHYCEAE								
..CENTRALES								
...COSCINODISCACEAE								
....CYCLOTELLA	--	-	56*	65	--	-	--	-
..PENNALES								
...EUNOTIACEAE								
....EUNOTIA	--	-	--	-	--	-	--	-
...FRAGILARIACEAE								
....FRAGILARIA	--	-	--	-	--	-	--	-
...NAVICULACEAE								
....NAVICULA	--	-	--	-	--	-	--	-
...NITZSCHIACEAE								
....NITZSCHIA	--	-	--	-	--	-	--	-
CRYPTOPHYTA (CRYPTOMONADS)								
.CRYPTOPHYCEAE								
..CRYPTOMONADALES								
...CRYPTOMONADACEAE								
....CRYPTOMONAS	--	-	--	-	26*	100	13*	50
CYANOPHYTA (BLUE-GREEN ALGAE)								
.CYANOPHYCEAE								
..HORMOGONALES								
...OSCILLATORIACEAE								
....LYNGBYA	--	-	--	-	--	-	--	-
....OSCILLATORIA	87*	100	--	-	--	-	--	-
EUGLENOPHYTA (EUGLENOIDS)								
.EUGLENOPHYCEAE								
..EUGLENALES								
...EUGLENACEAE								
....EUGLENA	--	-	--	-	--	-	13*	50
....EUTREPTIA	--	-	--	-	--	-	--	-
....TRACHELOMONAS	--	-	5	6	--	-	--	-

NOTE: * - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%

* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

01409815 WEST BRANCH WADING RIVER AT MAXWELL, NJ--Continued
PHYTOPLANKTON ANALYSES, OCTOBER 1978 TO SEPTEMBER 1979

DATE	JUL 26,79	AUG 7,79	SEP 5,79
TIME	1030	1030	1030
TOTAL CELLS/ML	13	3100	70
DIVERSITY: DIVISION	0.0	0.1	1.3
.CLASS	0.0	0.1	1.3
..ORDER	0.0	0.1	1.3
...FAMILY	0.0	0.1	2.0
....GENUS	0.0	0.9	2.0

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)						
.CHLOROPHYCEAE						
..VOLVOCALES						
...CHLAMYDOMONADACEAE						
....CHLAMYDOMONAS	--	-	--	-	--	-
CHRYSOPHYTA						
.BACILLARIOPHYCEAE						
..CENTRALES						
...COSCINODISCACEAE						
....CYCLOTELLA	--	-	--	-	--	-
..PENNALES						
...EUNOTIACEAE						
....EUNOTIA	--	-	--	-	25*	36
...FRAGILARIACEAE						
....FRAGILARIA	--	-	--	-	10	14
...NAVICULACEAE						
....NAVICULA	--	-	--	-	5	7
...NITZSCHIACEAE						
....NITZSCHIA	--	-	#	0	--	-
CRYPTOPHYTA (CRYPTOMONADS)						
.CRYPTOPHYCEAE						
..CRYPTOMONADALES						
...CRYPTOMONADACEAE						
....CRYPTOMONAS	13*	100	#	0	25*	36
CYANOPHYTA (BLUE-GREEN ALGAE)						
.CYANOPHYCEAE						
..HORMOGONALES						
...OSCILLATORIACEAE						
....LYNGBYA	--	-	2300*	73	--	-
....OSCILLATORIA	--	-	800*	26	--	-
EUGLENOPHYTA (EUGLENOIDS)						
.EUGLENOPHYCEAE						
..EUGLENALES						
...EUGLENACEAE						
....EUGLENA	--	-	--	-	--	-
....EUTREPTIA	--	-	--	-	5	7
....TRACHELOMONAS	--	-	--	-	--	-

NOTE: * - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%

- OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

01410000 OSWEGO RIVER AT HARRISVILLE, NJ

LOCATION.--Lat 39°39'47", long 74°31'26", Burlington County, Hydrologic Unit 02040301, and right bank 50 ft (15 m) downstream from bridge on State Highway Spur 563 at Harrisville, and 0.5 mi (0.8 km) upstream from confluence with West Branch Wading River.

DRAINAGE AREA.--64.0 mi^2 (165.8 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1930 to current year. Monthly discharge only for some periods, published in WSP 1302. Prior to October 1955, published as "East Branch Wading River at Harrisville".

GAGE.--Water-stage recorder. Concrete control since June 23, 1939. Datum of gage is 4.62 ft (1.408 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records good except those for periods of no gage-height record and those for periods above a discharge of 200 ft^3/s (5.7 m^3/s), which are fair. Figures given herein represent flow over main spillway and through bypass channel. Flow regulated by Harrisville Pond 200 ft (61 m) above station, capacity, about 30,000,000 gal (114,000 m^3) and by ponds and cranberry bogs 5 to 10 mi (8 to 16 km) upstream.

AVERAGE DISCHARGE.--49 years, 88.9 ft^3/s (2.518 m^3/s), 18.86 in/yr (479 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,390 ft^3/s (39.4 m^3/s) Aug. 20, 1939 (gage height, 9.54 ft or 2.908 m, from high-water mark in recorder shelter) from rating curve extended above 640 ft^3/s (18.1 m^3/s); no flow part of Oct. 26, 1932, June 10, 1970, and May 29, 30, 1974, while pond was filling.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 862 ft^3/s (24.4 m^3/s) Feb. 26, gage height, 6.43 ft (1.960 m); minimum, 34 ft^3/s (0.96 m^3/s) July 30, gage height, 2.85 ft (0.869 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	65	62	64	89	169	438	113	135	197	81	84	78
2	65	90	61	107	138	324	115	126	190	81	84	81
3	62	78	56	165	137	262	119	119	180	78	99	84
4	62	71	66	150	131	220	130	109	237	78	90	102
5	65	73	83	125	127	201	141	102	270	84	84	90
6	65	76	78	118	108	280	130	96	250	78	84	225
7	60	65	67	121	110	456	116	93	215	76	71	290
8	57	62	64	208	112	481	120	87	190	78	73	210
9	50	50	81	261	107	413	123	90	174	57	68	138
10	52	45	118	250	103	334	138	119	152	62	65	126
11	54	45	120	211	98	290	147	126	147	76	76	109
12	71	47	107	166	92	260	127	135	147	78	109	90
13	62	47	92	155	90	226	105	199	138	76	141	84
14	57	47	83	193	92	209	135	363	130	71	133	84
15	57	47	77	178	90	199	161	369	105	71	112	73
16	52	54	73	147	93	186	155	297	99	84	96	57
17	52	60	74	135	91	170	141	237	105	57	87	62
18	52	56	70	120	90	157	133	199	112	60	81	62
19	60	53	67	93	88	148	122	279	109	78	87	62
20	68	51	65	101	99	141	115	406	102	96	84	60
21	73	51	75	319	125	137	109	359	96	93	81	62
22	65	50	74	509	147	134	105	271	93	90	81	109
23	73	48	68	514	180	130	96	224	96	105	78	155
24	62	50	68	441	241	134	90	204	93	187	76	147
25	47	50	152	552	450	144	90	211	87	217	73	130
26	47	49	166	521	834	143	96	190	84	215	73	112
27	47	52	145	436	815	137	143	164	78	174	76	102
28	43	69	115	360	638	124	152	190	78	150	109	93
29	43	62	105	307	---	122	155	216	76	130	109	102
30	45	86	94	248	---	119	146	221	76	116	96	248
31	47	---	90	196	---	115	---	204	---	90	84	---
TOTAL	1780	1746	2718	7496	5595	6834	3768	6140	4106	3067	2744	3427
MEAN	57.4	58.2	87.7	242	200	220	126	198	137	98.9	88.5	114
MAX	73	90	166	552	834	481	161	406	270	217	141	290
MIN	43	45	56	89	88	115	90	87	76	57	65	57
CFSM	.90	.91	1.37	3.78	3.13	3.44	1.97	3.09	2.14	1.55	1.38	1.78
IN.	1.03	1.01	1.58	4.36	3.25	3.97	2.19	3.57	2.39	1.78	1.59	1.99

CAL YR 1978 TOTAL 45887 MEAN 126 MAX 825 MIN 43 CFSM 1.97 IN 26.67
WTR YR 1979 TOTAL 49421 MEAN 135 MAX 834 MIN 43 CFSM 2.11 IN 28.73

Note.--No gage-height record from Nov. 18 to Feb. 25.

01410000 OSWEGO RIVER AT HARRISVILLE, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1962-63, 1976 to current year.

COOPERATION.--Selected field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)
OCT 04...	1345	65	38	4.5	16.0	10.0	<1.0	80	8
FEB 26...	1050	828	52	4.3	1.0	13.0	--	<20	13
APR 17...	1045	145	46	4.3	10.0	9.6	2.0	<20	2
JUN 01...	0940	264	37	--	19.0	8.1	--	<20	8
AUG 13...	1100	145	37	4.2	19.0	8.9	--	170	350

DATE	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT 04...	3	.7	.4	2.4	.8	0	4.8	4.5	.0
FEB 26...	3	.6	.4	1.4	.4	0	4.8	2.5	.0
APR 17...	4	.9	.4	2.6	.6	0	6.1	4.6	.0
JUN 01...	3	.7	.2	4.6	.5	--	5.9	4.2	.0
AUG 13...	4	.9	.4	2.2	.7	0	5.3	4.1	.0

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHATE, TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 04...	5.8	30	<1.0	.30	1.6	1.9	--	.13	5.3
FEB 26...	2.3	30	.00	<1.0	--	.40	.40	--	8.6
APR 17...	2.7	24	<1.0	.20	1.0	1.2	--	.01	3.8
JUN 01...	3.1	42	<1.0	<.10	--	3.2	--	.19	9.5
AUG 13...	6.4	30	<1.0	.16	.44	.60	--	.03	12

01410150 EAST BRANCH BASS RIVER NEAR NEW GRETNA, NJ

LOCATION.--Lat 39°37'23", long 74°26'30", Burlington County, Hydrologic Unit 02040301, on left bank upstream of bridge on Stage Road, 0.7 mi (1.1 km) west of Lake Absegami, 2.2 mi (3.5 km) north of New Gretna, and 5.3 mi (8.5 km) upstream from mouth.

DRAINAGE AREA.--8.11 mi^2 (21.00 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1969 to 1974. January 1978 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5 ft (1.5 m), from topographic map.

REMARKS.--Water-discharge records good. Possible regulation by Lake Absegami.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 260 ft^3/s (7.36 m^3/s) July 4, 1978, gage height, 5.87 ft (1.789 m); minimum observed, 9.4 ft^3/s (0.27 m^3/s) May 2, 3, 1978, gage height, 3.56 ft (1.085 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge 148 ft^3/s (4.19 m^3/s) Feb. 25, gage height, 5.63 ft (1.716 m); minimum observed, 9.7 ft^3/s (0.27 m^3/s) Nov. 26, 27, gage height, 3.77 ft (1.149 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	12	19	16	27	41	25	21	28	18	12	11
2	15	11	14	23	26	38	26	20	25	18	12	13
3	15	11	12	33	25	37	27	19	24	16	15	15
4	15	11	17	26	25	35	28	19	36	15	15	13
5	15	12	24	19	24	34	31	21	38	15	16	13
6	14	12	21	18	23	67	28	19	30	14	13	34
7	14	11	16	20	23	99	24	18	26	14	12	33
8	14	11	14	39	24	54	23	17	24	13	12	22
9	13	11	15	35	23	44	25	17	22	13	11	16
10	13	11	19	26	21	40	28	16	22	13	11	14
11	13	12	16	21	20	41	26	16	21	17	13	13
12	13	12	14	19	19	40	24	19	23	16	21	13
13	13	11	13	22	20	37	23	23	21	15	26	13
14	14	11	12	29	20	36	28	27	19	13	21	13
15	15	10	12	27	20	36	34	26	18	13	15	12
16	14	11	12	22	21	33	28	22	17	12	13	12
17	14	12	13	20	19	32	25	18	19	12	12	11
18	13	12	12	19	18	32	24	20	21	13	12	11
19	13	11	11	17	25	31	22	34	19	16	15	11
20	13	10	11	18	23	30	21	45	17	14	14	11
21	13	10	15	58	21	29	21	34	16	13	13	11
22	13	10	14	57	25	28	21	28	16	13	13	19
23	12	10	12	39	27	28	20	26	18	14	12	25
24	12	11	13	38	39	29	20	26	19	18	12	20
25	12	11	32	49	117	30	20	31	17	18	12	15
26	12	9.8	30	41	48	29	21	30	16	15	12	13
27	13	12	21	35	65	27	32	25	15	13	12	12
28	13	16	17	32	46	26	33	23	15	12	12	12
29	12	15	15	32	---	26	28	24	15	12	12	18
30	12	22	14	29	---	26	25	27	15	12	12	36
31	12	---	15	28	---	25	---	25	---	12	11	---
TOTAL	414	351.8	495	907	834	1140	761	736	632	442	424	485
MEAN	13.4	11.7	16.0	29.3	29.8	36.8	25.4	23.7	21.1	14.3	13.7	16.2
MAX	15	22	32	58	117	99	34	45	38	18	26	36
MIN	12	9.8	11	16	18	25	20	16	15	12	11	11
CFSM	1.65	1.44	1.97	3.61	3.67	4.54	3.13	2.92	2.60	1.76	1.69	2.00
IN.	1.90	1.61	2.27	4.16	3.83	5.23	3.49	3.38	2.90	2.03	1.94	2.22

CAL YR 1978 TOTAL 8062.6 MEAN 22.1 MAX 131 MIN 9.4 CFSM 2.73 IN 36.98
WTR YR 1979 TOTAL 7621.8 MEAN 20.9 MAX 117 MIN 9.8 CFSM 2.58 IN 34.96

01410150 EAST BRANCH BASS RIVER NEAR NEW GRETNA, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to current year.

COOPERATION.-Selected field data and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)
OCT 04...	1300	15	47	4.6	14.5	7.3	<1.0	20	170
FEB 26...	1250	148	60	4.2	3.0	11.6	3.0	<20	33
APR 17...	1250	--	49	4.4	11.0	8.8	2.0	<20	17
JUN 01...	1100	25	38	--	17.0	6.0	--	<20	17
AUG 13...	1315	26	45	4.1	19.0	6.2	--	130	540

DATE	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT 04...	3	.5	.4	3.0	.4	1	4.0	5.7	.0
FEB 26...	4	.6	.5	3.6	.5	0	4.8	4.2	.0
APR 17...	4	.7	.5	2.9	.5	0	5.0	5.5	.0
JUN 01...	3	.5	.4	3.3	.4	--	4.7	5.8	.0
AUG 13...	4	.6	.5	2.6	.5	0	5.3	5.6	.0

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHATE, TOTAL (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 04...	6.5	28	<1.0	.20	.20	.40	--	<.01	4.8
FEB 26...	3.0	25	.00	<1.0	--	.20	.20	<.01	8.4
APR 17...	3.3	26	<1.0	<.10	--	.70	--	<.01	4.1
JUN 01...	4.2	40	<1.0	<.10	--	--	--	.13	6.6
AUG 13...	5.9	38	<1.0	.07	.43	.50	--	.24	7.5

01410500 ABSECON CREEK AT ABSECON, NJ

LOCATION.--Lat 39°25'45", long 74°31'16", Atlantic County, Hydrologic Unit 02040302, on right bank 30 ft (9 m) downstream from Doughty Pond Dam of Atlantic City Water Department, 1.0 mi (1.6 km) west of Absecon, and 3.4 mi (5.5 km) upstream from mouth.

DRAINAGE AREA.--16.6 mi^2 (43.0 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--December 1923 to April 1929 and June 1933 to December 1938 (monthly discharge only, published in WSP 1302; figures of daily discharge published in previous water-supply papers included diversions above station), May 1946 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to May 1946, water-stage recorder and wooden control at same site at datum 0.16 ft (0.049 m) lower.

REMARKS.--Water-discharge records good. Records represent flow at gage only. Diversion from Doughty Pond for municipal supply at Atlantic City (records given herein). Flow regulated by Doughty Pond, capacity, 245,000,000 gal (927,300 m^3), and by Kuehule Reservoir, capacity, 250,000,000 gal (946,200 m^3), 1.5 mi (2.4 km) above station.

AVERAGE DISCHARGE.--42 years (1924-28, 1933-38, 1946-79), 27.2 ft^3/s (0.770 m^3/s), adjusted for diversion.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 295 ft^3/s (8.35 m^3/s) Sept. 6, 1935; no flow several days in many years.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 265 ft^3/s (7.50 m^3/s) Feb. 26; minimum daily, 6.5 ft^3/s (0.184 m^3/s) Sept. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	14	25	22	43	63	40	41	40	28	17	11
2	14	14	20	32	28	53	41	34	43	28	20	12
3	11	14	17	47	33	46	46	36	36	24	22	12
4	13	17	37	30	36	41	46	38	50	18	20	8.8
5	15	16	46	25	36	44	49	34	53	23	15	11
6	15	15	36	27	33	100	41	28	50	15	14	46
7	14	14	25	29	38	170	32	32	38	14	9.6	36
8	12	14	22	54	38	100	28	32	36	13	12	19
9	11	12	30	46	36	70	40	29	29	14	8.8	14
10	9.6	12	29	34	36	59	46	28	28	15	14	12
11	12	14	21	32	34	60	38	28	32	20	36	12
12	14	15	20	30	36	56	38	32	38	17	65	12
13	13	12	19	34	38	47	38	38	29	14	54	12
14	16	12	20	41	36	50	57	56	27	14	38	14
15	15	12	15	36	36	49	57	49	25	14	23	14
16	13	12	17	29	37	40	49	41	22	13	18	9.6
17	16	9.6	29	28	36	41	41	32	23	12	15	11
18	15	16	17	28	34	41	38	36	25	17	14	12
19	9.6	14	15	17	43	41	36	46	23	25	18	12
20	11	12	15	36	32	41	36	47	20	16	15	6.5
21	8.0	12	25	125	30	38	36	38	20	15	15	8.8
22	9.6	14	19	107	32	40	37	28	21	13	15	38
23	13	14	17	60	36	41	37	28	28	13	14	29
24	11	22	22	56	84	46	37	32	28	46	13	16
25	13	18	67	100	245	50	37	46	23	196	14	14
26	15	14	46	68	265	41	44	38	20	77	17	13
27	17	17	32	50	147	38	73	32	20	41	15	12
28	14	25	24	49	86	36	56	27	21	25	14	13
29	14	23	17	46	---	41	46	25	21	15	13	14
30	13	36	18	38	---	41	40	29	22	15	15	15
31	14	---	20	36	---	41	---	25	---	15	13	---
TOTAL	404.8	465.6	782	1392	1644	1665	1280	1085	891	825	606.4	469.7
MEAN	13.1	15.5	25.2	44.9	58.7	53.7	42.7	35.0	29.7	26.6	19.6	15.7
MAX	17	36	67	125	265	170	73	56	53	196	65	46
MIN	8.0	9.6	15	17	28	36	28	25	20	12	8.8	6.5
(†)	3.7	2.6	2.9	1.2	5.1	2.4	5.4	8.9	8.2	11	12	10

CAL YR 1978 TOTAL 10402.98 MEAN 28.5 MAX 160 MIN .80 † 3.3
WTR YR 1979 TOTAL 11510.50 MEAN 31.5 MAX 265 MIN 6.5 † 6.2

† Diversion, in cubic feet per second, above station from Doughty Pond for municipal supply by Atlantic City.

01410784 GREAT EGG HARBOR RIVER NEAR SICKLERVILLE, NJ

LOCATION.--Lat 39°44'02", long 74°57'05", Camden County, Hydrologic Unit 02040302, at bridge on Sicklerville-New Freedom Road (Spur 536), 1.5 mi (2.4 km) northeast of Sicklerville, and 2.7 mi (4.3 km) upstream of New Brooklyn Lake dam.

DRAINAGE AREA.--15.1 mi² (39.1 km²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1972 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
OCT 05...	0945	8.9	113	6.2	12.0	6.2	1.1	540	540	23	5.3	2.3
DEC 05...	0910	35	111	5.3	9.5	7.2	3.2	--	--	21	4.8	2.2
JAN 18...	1130	19	114	6.2	2.0	10.2	1.4	11	80	22	5.2	2.1
MAR 15...	1040	31	99	--	5.5	8.4	1.6	23	5	19	4.7	1.7
JUN 13...	0920	46	55	4.5	14.5	3.0	.9	540	240	12	2.9	1.1
JUL 19...	1030	17	97	4.4	21.0	3.1	2.3	1300	340	20	5.1	1.8
AUG 15...	1100	17	88	4.5	18.0	4.8	1.1	1700	540	16	4.1	1.4

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)
OCT 05...	10	3.0	11	0	9	--	12	13	.0	7.4	81
DEC 05...	7.8	2.7	5	0	4	--	18	11	.1	7.1	91
JAN 18...	10	2.0	7	0	6	--	14	15	.1	6.4	73
MAR 15...	8.0	1.9	0	--	0	--	15	13	.1	4.1	63
JUN 13...	5.4	.9	0	0	0	.0	8.6	8.3	.1	4.9	75
JUL 19...	8.5	2.4	0	0	0	--	16	11	.1	6.3	88
AUG 15...	8.3	1.8	0	0	0	--	10	11	.1	7.3	84

DATE	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHATE, TOTAL (MG/L AS PO4)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 05...	--	--	2.2	<.10	--	1.5	3.7	--	2.4	2.3	6.7
DEC 05...	.78	.01	.79	.16	.46	.62	1.4	.29	--	--	16
JAN 18...	--	--	--	.74	.00	.74	--	--	.80	.65	7.4
MAR 15...	--	--	<1.0	.40	1.3	1.7	--	--	.61	.44	7.8
JUN 13...	--	--	<1.0	<.10	--	1.6	--	--	.61	.52	18
JUL 19...	--	--	<1.0	.50	1.8	2.3	--	--	1.8	1.7	12
AUG 15...	--	--	1.0	<.10	--	1.8	2.8	--	.76	.65	16

01410784 GREAT EGG HARBOR RIVER NEAR SICKLERVILLE, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	NITROGEN,NH4 + ORG. TOT IN BOT MAT (MG/KG AS N)	CARBON, INORGANIC, TOT IN BOT MAT (G/KG AS C)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (G/KG AS C)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)
OCT 05...	0945	570	3.8	3.8	--	--	0	--	--	--
DEC 05...	0910	--	--	--	--	1	--	--	--	0
JUN 13...	0920	--	--	--	300	4	--	0	110	0

DATE	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)
OCT 05...	<10	--	10	<10	--	<10	--	400	--	<10
DEC 05...	--	10	--	--	5	--	950	--	--	--
JUN 13...	--	10	--	--	5	--	1100	--	9	--

DATE	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)	SELENIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	PHENOLS (UG/L)
OCT 05...	--	<10	--	.00	--	<10	--	--	<10	--
DEC 05...	60	--	<.5	--	--	--	0	50	--	--
JUN 13...	20	--	<.5	--	15	--	0	50	--	0

DATE	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIAZINON, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT 05...	0	.0	3	9.2	2.7	17	.0	.0	.0	.0
DEC 05...	--	--	--	--	--	--	--	--	--	--
JUN 13...	--	--	--	--	--	--	--	--	--	--

DATE	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	MALATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	METHOXYCHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARATHION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRITHION, TOT. IN BOTTOM MATL. (UG/KG)	PARATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	TRITHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT 05...	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
DEC 05...	--	--	--	--	--	--	--	--	--	--
JUN 13...	--	--	--	--	--	--	--	--	--	--

01410787 GREAT EGG HARBOR RIVER TRIBUTARY AT SICKLERVILLE, NJ

LOCATION.--Lat 39°43'31", long 74°57'39", Camden County, Hydrologic Unit 02040301, on left bank on upstream wingwall of bridge on Blackwood-New Brooklyn Road, 0.8 mi (1.21 km) northeast of Sicklerville, and 0.77 mi (1.24 km) upstream from mouth.

DRAINAGE AREA.--1.64 mi^2 (4.25 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1972 to September 1979 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 117.21 ft (35.726 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records poor. Some regulation by Winslow Crossing Water Department above station. Minor flow augmentation occurs occasionally when wells are flushed at industrial plant within the drainage basin.

AVERAGE DISCHARGE.--7 years, 2.01 ft^3/s (0.057 m^3/s), 16.64 in/yr (423 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 68 ft^3/s (1.93 m^3/s) Jan. 26, 1978, gage height, 4.62 ft (1.408 m) from rating curves extended above 40 ft^3/s (1.13 m^3/s); no flow Nov. 28 to Dec. 4, 1973.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 30 ft^3/s (0.85 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage Height (ft)	Gage Height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage Height (ft)	Gage Height (m)
Jan. 21	0745	*66	1.87	4.60	1.402	Mar. 6	1430	31	0.88	3.24	0.988
Feb. 26	0430	58	1.64	4.26	1.298	May 25	0245	33	0.93	3.38	1.030

Minimum daily discharge, 0.12 ft^3/s (0.003 m^3/s) Nov. 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.36	.39	.36	.76	1.5	4.8	1.5	1.5	1.8	2.3	.61	.61
2	.39	.21	.23	8.1	1.2	4.0	2.2	1.6	1.6	1.9	1.2	.51
3	.36	.21	.23	6.0	.88	3.3	2.4	1.2	2.2	1.5	2.1	.47
4	.76	.21	1.8	1.8	.82	2.8	2.7	1.2	5.1	2.1	1.8	.43
5	.29	.18	3.2	1.2	.76	2.7	2.8	1.3	2.9	2.3	.56	.56
6	.29	.18	.95	1.2	.70	16	2.0	.95	2.0	1.2	.36	4.2
7	.29	.18	.39	3.8	.70	12	1.5	.71	1.7	.76	.32	1.2
8	.26	.26	.36	12	.70	5.6	1.2	.82	1.5	.66	.76	.88
9	.26	.18	4.2	4.8	.65	4.1	2.9	.88	1.2	.56	.36	.71
10	.26	.18	1.9	2.3	.60	3.3	3.7	.32	1.1	.66	.61	.61
11	1.3	.21	.76	1.6	.62	6.6	2.3	.26	7.4	1.1	1.6	.56
12	.88	.21	.56	1.3	.66	4.3	1.9	.95	5.5	.61	5.5	.61
13	.26	.21	.56	2.9	.68	3.1	1.7	3.2	2.9	.51	3.8	.51
14	.29	.16	.43	3.6	.70	3.4	5.2	4.1	2.2	.47	2.5	.66
15	.29	.47	.39	2.1	.70	2.9	3.8	2.7	1.8	.47	2.3	.88
16	.32	.23	.39	1.5	.70	2.2	2.5	2.3	1.6	.56	.66	.61
17	.47	.26	.56	1.4	.70	2.0	2.1	1.9	2.6	.47	.43	.56
18	.36	.47	.36	1.2	.70	1.7	1.7	4.4	2.5	3.0	1.2	.51
19	.32	.23	.36	.95	.66	1.2	1.3	7.4	2.0	1.4	2.1	.61
20	.29	.21	.47	3.8	1.4	1.6	1.1	5.1	1.9	.66	1.0	.51
21	.26	.36	1.0	47	.74	1.2	1.0	3.5	1.5	.56	.71	.61
22	.23	.21	.51	8.9	4.1	1.0	.95	3.0	1.7	.51	.82	2.0
23	.23	.23	.43	4.2	3.4	.88	.88	3.4	3.6	.66	.18	2.3
24	.29	.18	2.1	10	19	7.8	.76	6.3	3.3	.76	.61	1.0
25	.56	.14	5.6	11	39	6.7	1.4	16	2.8	.82	.39	.76
26	.23	.12	1.6	5.9	36	3.4	2.6	4.6	2.5	.43	1.0	.76
27	.36	.56	1.2	4.1	9.5	2.3	5.2	3.0	2.4	.39	1.4	.66
28	.29	.76	.76	3.6	6.1	1.9	3.0	2.6	2.2	.36	3.3	.66
29	.29	1.4	.66	3.3	---	1.8	2.4	2.5	2.1	.36	5.0	.76
30	.26	1.3	.61	2.2	---	1.6	1.8	2.4	1.9	.36	2.5	2.8
31	.29	---	.66	1.8	---	1.5	---	1.9	---	.36	1.2	---
TOTAL	11.59	10.10	33.59	164.31	133.87	117.68	66.49	91.99	75.5	28.76	46.88	28.51
MEAN	.37	.34	1.08	5.30	4.78	3.80	2.22	2.97	2.52	.93	1.51	.95
MAX	1.3	1.4	5.6	47	39	16	5.2	16	7.4	3.0	5.5	4.2
MIN	.23	.12	.23	.76	.60	.88	.76	.26	1.1	.36	.18	.43
CFSM	.23	.21	.66	3.23	2.92	2.32	1.35	1.81	1.54	.57	.92	.58
IN.	.26	.23	.76	3.72	3.03	2.67	1.51	2.09	1.71	.65	1.06	.65

CAL YR 1978 TOTAL 671.05 MEAN 1.84 MAX 51 MIN .12 CFSM 1.12 IN 15.21
WTR YR 1979 TOTAL 809.27 MEAN 2.22 MAX 47 MIN .12 CFSM 1.35 IN 18.35

01410787 GREAT EGG HARBOR RIVER TRIBUTARY AT SICKLERVILLE, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1972 to current year.

PERIOD OF DAILY RECORD.--
SUSPENDED-SEDIMENT DISCHARGE: May 1974 to September 1977.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)
DEC											
05...	1110	2.9	126	6.2	9.0	10.6	3.1	45	11	4.2	3.3

DATE	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	CARBON, ORGANIC TOTAL (MG/L AS C)
DEC										
05...	2.8	19	0	16	15	6.1	.1	1.8	74	8.1

01410789 GREAT EGG HARBOR RIVER TRIBUTARY NO. 2 AT WINSLOW CROSSING, NJ

LOCATION.--Lat 39°42'17", long 74°57'01", Camden County, Hydrologic Unit 02040302, on Sicklerville Road, 1.2 mi (1.9 km) southeast of Winslow Crossing, and at head of storm sewer which runs into Great Egg Harbor River 0.7 mi (1.1 km) downstream.

DRAINAGE AREA.--0.52 mi^2 (1.35 km^2).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1972 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
DEC 05...	1255	141	6.6	9.0	9.4	2.2	45	9.3	5.2	5.4

DATE	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	CARBON, ORGANIC TOTAL (MG/L AS C)
DEC 05...	3.1	26	0	21	20	10	.1	2.9	86	7.1

01410803 FOURMILE BRANCH AT WINSLOW CROSSING, NJ

LOCATION.--Lat 39°42'07", long 74°58'11", Camden County, Hydrologic Unit 02040302, at bridge on Andrews Road in Winslow Crossing, 1.4 mi (2.2 km) northeast of Williamstown, and 2.1 mi (3.4 km) upstream from Great Egg Harbor River.

DRAINAGE AREA.--6.22 mi² (16.11 km²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1972 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
DEC									
05...	1130	102	4.5	9.5	8.5	2.7	19	3.5	2.5

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
DEC									
05...	5.7	1.9	0	0	0	16	10	.1	6.8

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)
DEC									
05...	76	.98	.02	1.0	.02	.69	.71	1.7	.03

01410810 FOURMILE BRANCH AT NEW BROOKLYN, NJ

LOCATION.--Lat 39°41'47", long 74°56'25", Camden County, Hydrologic Unit 02040302, on left bank 70 ft (21 m) upstream from bridge on Malaga Road, 0.3 mi (0.5 km) northeast of New Brooklyn, and 0.3 mi (0.5 km) upstream from mouth.

DRAINAGE AREA.--7.74 mi^2 (20.05 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1972 to September 1979 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 102 ft (31.1 m), from topographic map.

REMARKS.--Water-discharge records good. Some regulation by sewage treatment plant upstream.

AVERAGE DISCHARGE.--7 years, 13.4 ft^3/s (0.379 m^3/s), 23.51 in/yr (597 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 136 ft^3/s (3.85 m^3/s) Feb. 26, 1979, gage height, 4.67 ft (1.423 m); minimum, 3.0 ft^3/s (0.08 m^3/s) July 24, 1977, gage height, 1.76 ft (0.536 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 60 ft^3/s (1.70 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage Height (ft)	Gage Height (m)
Jan. 21	2400	111	3.14	4.42	1.347
Feb. 26	1545	*136	3.85	4.67	1.423

Minimum discharge, 5.0 ft^3/s (0.14 m^3/s) Nov. 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.1	6.3	11	12	14	33	16	14	15	7.8	8.4	14
2	8.2	5.6	8.2	21	13	27	18	13	15	8.6	7.6	12
3	6.9	5.6	7.1	37	12	24	19	12	15	10	15	10
4	6.8	6.0	15	27	11	22	19	11	28	9.2	14	9.8
5	6.9	6.8	23	15	11	20	21	12	28	10	11	9.2
6	6.3	6.8	19	13	9.8	31	18	11	19	9.2	9.6	26
7	5.8	6.6	12	14	9.6	54	15	11	19	8.4	9.0	30
8	5.5	6.3	9.8	34	9.8	43	14	9.8	28	8.2	8.2	17
9	5.6	5.5	15	40	9.8	27	17	9.2	17	7.8	7.8	13
10	6.3	5.3	27	23	10	22	24	8.8	13	7.8	7.5	12
11	6.0	6.1	18	15	9.2	26	20	8.6	20	7.8	8.2	11
12	5.5	6.1	13	12	9.4	28	17	9.0	43	6.9	15	9.2
13	6.0	5.8	11	13	11	22	16	15	27	6.6	20	8.6
14	6.1	5.1	10	20	10	20	23	28	16	6.9	13	8.8
15	6.3	5.1	9.8	17	10	21	28	21	13	7.6	11	11
16	6.5	5.6	9.4	13	11	18	21	14	12	7.3	9.8	9.4
17	8.0	6.3	11	12	9.8	17	17	12	14	8.2	9.4	8.6
18	7.5	8.2	11	11	9.2	16	16	15	16	12	8.8	9.0
19	7.1	8.0	9.8	9.8	15	16	14	33	13	20	9.8	8.2
20	6.8	6.9	9.2	11	9.6	15	13	37	11	12	8.6	7.5
21	6.0	6.1	13	65	11	14	13	24	10	9.8	8.0	7.3
22	5.8	5.3	13	89	15	14	12	17	9.6	9.0	8.6	16
23	6.0	5.0	11	45	18	14	12	16	14	8.6	8.6	23
24	6.6	5.3	11	30	33	20	12	20	12	11	8.4	20
25	6.6	5.3	29	41	80	40	14	41	11	11	8.8	13
26	6.6	5.3	25	38	127	30	16	49	9.4	11	9.2	11
27	7.3	6.1	16	27	91	21	32	26	8.8	11	11	9.6
28	7.3	9.6	13	23	50	18	28	19	8.4	9.2	28	9.2
29	6.9	9.6	11	22	---	16	21	16	7.8	8.8	31	9.8
30	6.8	15	10	18	---	16	16	18	7.5	8.6	28	21
31	6.8	---	10	16	---	16	---	15	---	8.4	23	---
TOTAL	202.9	196.6	421.3	783.8	639.2	721	542	565.4	480.5	288.7	384.3	384.2
MEAN	6.55	6.55	13.6	25.3	22.8	23.3	18.1	18.2	16.0	9.31	12.4	12.8
MAX	8.2	15	29	89	127	54	32	49	43	20	31	30
MIN	5.5	5.0	7.1	9.8	9.2	14	12	8.6	7.5	6.6	7.5	7.3
CFSM	.85	.85	1.76	3.27	2.95	3.01	2.34	2.35	2.07	1.20	1.60	1.65
IN.	.98	.94	2.02	3.77	3.07	3.46	2.60	2.72	2.31	1.39	1.85	1.85

CAL YR 1978 TOTAL 5010.3 MEAN 13.7 MAX 90 MIN 5.0 CFSM 1.77 IN 24.08
WTR YR 1979 TOTAL 5609.9 MEAN 15.4 MAX 127 MIN 5.0 CFSM 1.99 IN 26.96

01410810 FOURMILE BRANCH AT NEW BROOKLYN, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1972 to current year.

PERIOD OF DAILY RECORD.--
SUSPENDED-SEDIMENT DISCHARGE: April 1974 to March 1976.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)
DEC 05...	1445	24	94	5.2	8.0	9.6	3.6	19	3.7	2.4	7.4

DATE	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	CARBON, ORGANIC TOTAL (MG/L AS C)
DEC 05...	2.2	4	0	4	17	10	.1	7.6	85	17

01410820 GREAT EGG HARBOR RIVER NEAR BLUE ANCHOR, NJ

LOCATION.--Lat 39°40'09", long 74°54'49", Camden County, Hydrologic Unit 02040302, downstream side of bridge on Broad Lane Road, 2.1 mi (3.4 km) downstream from confluence of Fourmile Branch, and 1.9 mi (3.1 km) southwest of Blue Anchor.

DRAINAGE AREA.--37.3 mi^2 (96.6 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1972 to September 1979 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 88.85 ft (27.081 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records fair.

AVERAGE DISCHARGE.--7 years, 66.2 ft^3/s (1.874 m^3/s), 24.08 in/yr (612 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 754 ft^3/s (21.4 m^3/s) July 15, 1975, gage height, 6.79 ft (2.070 m); minimum, 11 ft^3/s (0.31 m^3/s) July 24, 1977, gage height, 2.60 ft (0.792 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 250 ft^3/s (7.08 m^3/s) and maximum(*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage Height (ft)	Gage Height (m)
Jan. 22	1530	371	10.5	6.15	1.875
Feb. 27	1845	*457	12.9	6.51	1.984

Minimum daily discharge, 25 ft^3/s (0.71 m^3/s) Oct 12, 13, 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	35	65	54	79	240	76	77	76	45	33	85
2	30	33	60	70	74	188	77	69	75	47	33	65
3	30	33	54	120	68	141	82	66	73	49	59	51
4	30	33	63	126	65	119	86	64	100	45	64	46
5	31	35	81	126	62	111	92	65	111	47	57	42
6	31	35	87	99	61	132	89	63	105	45	48	93
7	29	35	79	71	63	216	80	61	96	42	39	115
8	28	34	70	114	61	218	74	58	114	40	35	105
9	27	33	71	156	58	184	75	57	88	38	32	88
10	27	32	98	170	60	134	93	55	71	37	31	67
11	26	32	97	150	57	121	97	53	80	36	35	57
12	25	32	88	125	52	123	88	54	126	36	62	48
13	25	32	77	107	54	116	81	67	122	35	82	43
14	25	31	63	78	53	109	93	112	107	33	78	42
15	26	30	56	80	52	106	110	109	90	33	69	54
16	25	32	52	76	54	99	107	93	71	33	54	46
17	29	34	54	68	54	92	96	74	69	33	43	43
18	29	41	53	63	50	87	83	74	80	42	39	40
19	28	44	51	61	54	83	75	111	73	69	44	38
20	27	42	47	60	54	78	71	125	65	61	43	36
21	27	39	54	225	52	75	68	121	59	60	40	35
22	26	36	57	360	61	74	66	112	55	51	38	45
23	26	34	54	325	71	73	64	98	63	43	37	60
24	28	35	52	239	101	82	63	100	66	58	37	77
25	28	35	87	240	293	119	66	138	64	52	37	69
26	29	34	99	216	447	125	70	179	60	49	42	58
27	33	36	90	179	455	115	103	146	54	49	44	49
28	35	48	79	142	377	101	112	114	49	40	93	39
29	35	51	68	118	---	88	106	98	47	37	97	39
30	35	63	58	99	---	82	91	92	45	36	92	69
31	34	---	52	86	---	78	---	84	---	34	98	---
TOTAL	890	1099	2116	4203	3042	3709	2534	2789	2354	1355	1635	1744
MEAN	28.7	36.6	68.3	136	109	120	84.5	90.0	78.5	43.7	52.7	58.1
MAX	35	63	99	360	455	240	112	179	126	69	98	115
MIN	25	30	47	54	50	73	63	53	45	33	31	35
CFSM	.77	.98	1.83	3.65	2.92	3.22	2.27	2.41	2.11	1.17	1.41	1.56
IN.	.89	1.10	2.11	4.19	3.03	3.70	2.53	2.78	2.35	1.35	1.63	1.74

CAL YR 1978 TOTAL 22339 MEAN 61.2 MAX 280 MIN 24 CFSM 1.64 IN 22.28
WTR YR 1979 TOTAL 27470 MEAN 75.3 MAX 455 MIN 25 CFSM 2.02 IN 27.40

01410820 GREAT EGG HARBOR RIVER NEAR BLUE ANCHOR, NJ

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1972 to current year.

COOPERATION.--Selected field date and samples for laboratory analyses supplied by New Jersey Department of Environmental Protection, Division of Water Resources. Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, EC BROTH (MPN)	STREP-TOCOCCI FECAL (MPN)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
OCT 05...	1200	31	80	6.4	12.5	9.4	.6	80	70	18	3.6	2.2
DEC 05...	1100	81	87	4.7	8.0	8.8	2.7	--	--	17	3.5	2.1
JAN 18...	1255	62	97	6.0	3.0	10.4	1.3	920	23	17	3.8	1.9
MAR 20...	1030	78	71	5.7	7.5	9.8	1.6	920	27	15	3.4	1.5
JUN 13...	1130	121	53	4.3	16.0	5.6	1.5	540	220	12	2.8	1.2
JUL 17...	1130	33	58	5.4	20.5	7.5	.7	490	2400	16	3.1	1.9
AUG 15...	1300	69	71	4.3	18.0	6.8	1.1	920	350	15	3.5	1.5

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)
OCT 05...	7.0	1.9	10	0	8	--	7.5	8.6	.0	6.5	62
DEC 05...	6.3	2.1	1	0	1	--	14	9.5	.0	6.7	78
JAN 18...	8.5	1.4	2	0	2	--	10	13	.0	6.2	64
MAR 20...	6.1	1.6	5	0	4	--	11	9.0	.0	4.6	52
JUN 13...	4.6	.9	0	0	0	.0	8.3	7.5	.1	5.0	76
JUL 17...	8.0	1.9	5	0	4	--	6.9	11	.0	5.3	66
AUG 15...	6.2	1.3	0	0	0	--	9.8	8.8	.0	7.1	74

DATE	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHATE, TOTAL (MG/L AS PO4)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 05...	--	--	1.5	<.10	--	1.9	3.4	--	1.2	1.0	3.0
DEC 05...	.79	.01	.80	.05	.57	.62	1.4	.19	--	--	14
JAN 18...	--	--	--	.25	.02	.27	--	--	.47	.28	7.0
MAR 20...	--	--	1.2	.20	.60	.80	2.0	--	.49	.39	8.1
JUN 13...	--	--	<1.0	<.10	--	1.6	--	--	.39	.36	25
JUL 17...	--	--	1.0	<.10	--	3.0	4.0	--	1.1	1.1	5.8
AUG 15...	--	--	<1.0	<.10	--	1.5	--	--	.38	.38	15

01410820 GREAT EGG HARBOR RIVER NEAR BLUE ANCHOR, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	NITROGEN, NH4 + ORG. TOT IN BOT MAT (MG/KG AS N)	CARBON, INORGANIC, TOT IN BOT MAT (G/KG AS C)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (G/KG AS C)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)
OCT 05...	1200	510	1.3	1.3	--	--	0	--	--	--
DEC 05...	1100	--	--	--	--	1	--	--	--	--
JUN 13...	1130	--	--	--	340	3	--	0	110	1

DATE	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)
OCT 05...	10	--	10	<10	--	<10	--	100	--	<10
DEC 05...	--	10	--	--	4	--	720	--	--	--
JUN 13...	--	20	--	--	7	--	1000	--	8	--

DATE	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)	SELENIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	PHENOLS (UG/L)
OCT 05...	--	<10	--	.00	--	<10	--	--	<10	--
DEC 05...	60	--	<.5	--	--	--	0	50	--	--
JUN 13...	20	--	<.5	--	22	--	0	40	--	0

DATE	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIAZINON, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT 05...	0	.0	0	.5	.0	.0	.0	.0	.0	.0
DEC 05...	--	--	--	--	--	--	--	--	--	--
JUN 13...	--	--	--	--	--	--	--	--	--	--

DATE	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	MALATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	METHOXYCHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARATHION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRITHION, TOT. IN BOTTOM MATL. (UG/KG)	PARATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	TRITHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT 05...	.0	.0	.0	.0	.0	.0	.0	.0	.0	0
DEC 05...	--	--	--	--	--	--	--	--	--	--
JUN 13...	--	--	--	--	--	--	--	--	--	--

01411000 GREAT EGG HARBOR RIVER AT FOLSOM, NJ

LOCATION.--Lat 39°35'42", long 74°51'06", Atlantic County, Hydrologic Unit 02040302, on left bank, 25 ft (7.6 m) upstream from bridge on State Highway 54, 1.0 mi (1.6 km) south of Folsom, and 2.0 mi (3.2 km) upstream from Pennypot Stream.

DRAINAGE AREA.--56.3 mi^2 (145.8 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1925 to current year. Prior to October 1947, published as "Great Egg River at Folsom".

REVISED RECORDS.--WSP 781: Drainage area. WSP 1432: 1928(M), 1933.

GAGE.--Water-stage recorder. Concrete control since Nov. 26, 1934. Datum of gage is 53.32 ft (16.252 m) National Geodetic Vertical Datum of 1929. Prior to Mar. 6, 1941, water-stage recorder at site 100 ft (30 m) downstream at same datum. Mar. 6 to Oct. 5, 1941, nonrecording gage at site 145 ft (44 m) downstream at datum 0.25 ft (0.076 m) higher.

REMARKS.--Water-discharge records good.

AVERAGE DISCHARGE.--54 years, 87.0 ft^3/s (2.464 m^3/s), 20.99 in/yr (533 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,440 ft^3/s (40.8 m^3/s) Sept. 3, 1940, gage height, 9.09 ft (2.771 m); minimum, 15 ft^3/s (0.42 m^3/s) Sept. 6, 1957, Aug. 28-30, 1966; minimum gage height, 3.42 ft (1.042 m) Aug. 28-30, 1966.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 771 ft^3/s (21.8 m^3/s) Feb. 27, gage height, 7.25 ft (2.210 m); minimum, 39 ft^3/s (1.10 m^3/s) Oct. 16, 24, 25, 26, gage height, 3.63 ft (1.106 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42	42	77	84	144	495	116	134	125	70	55	115
2	46	42	81	92	128	363	113	116	126	72	53	107
3	46	42	78	123	117	283	116	103	123	73	69	92
4	46	42	81	162	110	233	122	98	141	72	89	75
5	47	43	90	163	105	200	129	96	170	72	95	69
6	47	43	103	146	100	217	132	95	179	70	83	86
7	46	43	115	129	90	296	125	92	160	67	70	117
8	43	43	110	141	93	357	116	89	137	64	61	149
9	42	43	106	188	90	326	110	84	160	61	55	132
10	42	42	113	208	93	274	116	81	144	60	52	110
11	42	42	128	188	84	238	128	81	119	58	59	92
12	40	42	132	155	80	217	132	90	149	58	73	75
13	40	42	120	135	84	206	125	92	203	55	95	67
14	40	42	110	122	81	191	126	122	193	53	103	64
15	40	42	96	123	81	173	143	166	152	52	102	64
16	40	43	84	123	84	157	165	168	125	52	92	67
17	45	45	80	116	83	144	155	135	113	52	73	64
18	47	50	80	106	78	134	138	113	125	55	64	59
19	46	55	78	99	84	128	122	117	126	69	66	56
20	45	55	73	89	83	122	110	175	112	83	67	55
21	43	52	75	154	86	116	103	208	98	80	64	52
22	42	50	80	371	92	113	99	193	89	75	61	70
23	42	47	81	448	102	109	96	165	86	67	58	98
24	39	47	80	405	138	115	93	144	92	83	58	109
25	39	49	95	363	279	138	93	165	95	87	59	115
26	39	47	120	332	593	186	102	213	90	78	64	102
27	40	49	140	296	751	201	123	249	84	77	72	84
28	43	58	129	254	681	175	155	215	78	70	102	72
29	43	64	115	218	---	149	173	173	75	62	129	69
30	43	70	99	189	---	131	157	147	72	59	138	81
31	43	---	87	165	---	120	---	131	---	58	125	---
TOTAL	1328	1416	3036	5887	4614	6307	3733	4250	3741	2064	2406	2567
MEAN	42.8	47.2	97.9	190	165	203	124	137	125	66.6	77.6	85.6
MAX	47	70	140	448	751	495	173	249	203	87	138	149
MIN	39	42	73	84	78	109	93	81	72	52	52	52
CFSM	.76	.84	1.74	3.38	2.93	3.61	2.20	2.43	2.22	1.18	1.38	1.52
IN.	.88	.94	2.01	3.89	3.05	4.17	2.47	2.81	2.47	1.36	1.59	1.70

CAL YR 1978 TOTAL 37501 MEAN 103 MAX 415 MIN 39 CFSM 1.83 IN 24.78
WTR YR 1979 TOTAL 41349 MEAN 113 MAX 751 MIN 39 CFSM 2.01 IN 27.32

01411000 GREAT EGG HARBOR RIVER AT FOLSOM, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1961 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1969 to April 1975, April 1977 to current year.
WATER TEMPERATURES: October 1960 to April 1975, April 1977 to current year.
SUSPENDED-SEDIMENT DISCHARGE: December 1965 to September 1970, October 1978 to September 1979.

INSTRUMENTATION.--Temperature recorder since October 1960, water-quality monitor April 1969 to April 1975, and since April 1977.

EXTREMES FOR PERIOD OF RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 163 micromhos Aug. 25, 1977; minimum, 41 micromhos July 14, 1972.
WATER TEMPERATURES: Maximum, 24.0°C July 23-24, 1972, Aug. 17, 1978; minimum, 0.0°C on many days during winter months.
SEDIMENT CONCENTRATIONS: Maximum daily, 46 mg/L July 31, 1969; minimum daily, less than 0.5 mg/L on many days from 1965 to 1970.
SEDIMENT LOADS: Maximum daily 59 tons (54 Mg) April 17, 1970; minimum daily 0.03 ton (0.03 Mg) Sept. 19, 1968.

EXTREMES FOR CURRENT YEAR.--
SEDIMENT CONCENTRATIONS: Maximum daily mean, 21 mg/L Feb. 26, 1979; minimum daily mean 1 mg/L on several days throughout the year.
SEDIMENT LOADS: Maximum daily, 35 tons (32 Mg) Feb. 26, 27, 1979; minimum daily, 0.22 tons (0.20 Mg) Nov. 3, 1978.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
OCT											
10...	1040	42	81	6.7	10.0	9.9	.7	<2	49	14	3.0

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
OCT										
10...	1.6	7.4	1.5	9	0	7	.0	7.9	13	.1

DATE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHATE, TOTAL (MG/L AS PO4)	PHOSPHATE, ORTHO, DISSOLVED (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT										
10...	6.5	52	1.0	.08	1.4	1.5	2.5	.35	.06	2.9

01411000 GREAT EGG HARBOR RIVER AT FOLSOM, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	NITROGEN,NH4 + ORG. TOT IN BOT MAT (MG/KG AS N)	CARBON, INORGANIC, TOT IN BOT MAT (G/KG AS C)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (G/KG AS C)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD)
OCT 10...	1040	130	.8	1.8	80	0	0	0	0	<10

DATE	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)
OCT 10...	30	<10	<10	230	20	160	1200	5	130	660

DATE	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)	SELENIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	PHENOLS (UG/L)	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT 10...	10	<.5	.00	110	<10	0	70	20	0	0

DATE	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIAZINON, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT 10...	.0	2	.0	.0	2.1	.0	.0	.0	.0	.0

DATE	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	MALATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	METHOXYCHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARATHION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRITHION, TOT. IN BOTTOM MATL. (UG/KG)	PARATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	TRITHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT 10...	.0	.0	.0	.0	.0	.0	.0	.0	0

01411000 GREAT EGG HARBOR RIVER AT FOLSOM, NJ--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	105	97	102	86	84	85	94	86	91	87	84	86
2	109	101	104	91	83	86	95	88	92	87	77	84
3	103	101	104	84	80	82	91	81	86	76	70	72
4	106	103	104	82	79	80	82	73	76	77	69	74
5	107	97	103	83	78	81	84	57	67	81	78	80
6	100	97	98	83	77	81	87	66	80	81	80	80
7	98	94	96	83	81	82	95	78	90	89	80	84
8	94	93	94	82	78	80	88	79	82	89	78	84
9	95	93	94	80	79	79	82	74	77	84	76	79
10	95	93	94	80	75	77	75	67	71	94	85	93
11	100	94	98	77	76	76	80	70	76	98	95	97
12	99	98	99	81	76	79	82	78	80	98	95	97
13	98	93	94	83	81	82	81	79	80	103	93	97
14	98	93	96	84	83	83	81	78	79	97	91	95
15	98	97	97	83	78	81	79	77	78	100	95	97
16	99	96	97	79	77	78	77	75	76	107	99	104
17	100	92	96	79	75	77	77	73	75	107	105	107
18	94	91	92	85	77	82	74	73	74	104	97	100
19	93	91	92	81	75	78	76	74	75	97	95	96
20	94	92	93	82	81	82	78	74	75	104	94	96
21	94	90	92	83	81	82	79	72	73	---	---	---
22	89	85	87	84	81	83	72	71	71	---	---	---
23	86	84	85	81	76	78	76	72	74	---	---	---
24	86	84	85	79	77	78	77	74	76	---	---	---
25	88	83	86	80	78	79	74	66	69	---	---	---
26	89	86	88	80	79	80	74	66	70	---	---	---
27	90	85	88	84	80	81	79	75	76	---	---	---
28	87	83	85	81	76	79	78	77	77	---	---	---
29	87	85	86	88	76	80	79	78	78	---	---	---
30	85	84	85	90	84	87	79	78	78	---	---	---
31	86	84	85	---	---	---	83	79	81	---	---	---
MONTH	109	83	94	91	75	81	95	57	78	107	69	90

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---									
2	---	---	---									
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11	---	---	---									
12	95	91	---									
13	94	89	91									
14	94	91	93									
15	92	89	91									
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30	---	---	---									
31	---	---	---									
MONTH	95	89	92									

01411000 GREAT EGG HARBOR RIVER AT FOLSOM, NJ--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	JUNE MAX	JUNE MIN	JUNE MEAN	JULY MAX	JULY MIN	JULY MEAN	AUGUST MAX	AUGUST MIN	AUGUST MEAN	SEPTEMBER MAX	SEPTEMBER MIN	SEPTEMBER MEAN
1	---	---	---	---	---	---	87	85	86	---	---	---
2	---	---	---	---	---	---	87	84	86	---	---	---
3	---	---	---	---	---	---	95	61	73	---	---	---
4	---	---	---	---	---	---	63	59	61	---	---	---
5	---	---	---	---	---	---	61	59	60	---	---	---
6	---	---	---	---	---	---	71	61	67	---	---	---
7	---	---	---	---	---	---	76	71	74	---	---	---
8	---	---	---	---	---	---	79	74	77	---	---	---
9	---	---	---	---	---	---	83	79	81	---	---	---
10	---	---	---	---	---	---	90	83	88	61	60	---
11	---	---	---	87	83	84	95	74	85	66	60	64
12	---	---	---	82	80	82	80	54	68	73	67	70
13	---	---	---	83	79	81	63	59	60	75	72	73
14	---	---	---	85	82	83	64	63	64	76	71	75
15	---	---	---	86	83	84	65	64	65	75	66	70
16	---	---	---	89	86	88	66	64	65	72	70	71
17	---	---	---	91	88	89	76	67	73	79	73	75
18	---	---	---	91	87	89	81	76	79	79	79	79
19	---	---	---	91	75	81	81	74	78	85	79	82
20	---	---	---	77	74	76	74	73	73	82	81	82
21	---	---	---	79	75	78	77	74	75	83	81	82
22	76	73	---	76	73	75	77	74	75	80	56	72
23	76	71	73	76	66	74	83	75	79	57	54	55
24	72	63	68	74	58	64	87	82	85	59	55	57
25	66	63	65	60	54	58	82	81	82	62	58	61
26	67	62	65	70	60	64	86	73	79	61	54	58
27	68	62	66	71	66	68	78	76	76	63	57	61
28	70	67	68	75	70	73	---	---	---	69	64	66
29	69	58	65	81	76	79	---	---	---	72	66	69
30	62	55	59	82	80	81	---	---	---	68	50	61
31	---	---	---	85	82	84	---	---	---	---	---	---
MONTH	76	55	66	91	54	78	95	54	75	85	50	69

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	OCTOBER MAX	OCTOBER MIN	OCTOBER MEAN	NOVEMBER MAX	NOVEMBER MIN	NOVEMBER MEAN	DECEMBER MAX	DECEMBER MIN	DECEMBER MEAN	JANUARY MAX	JANUARY MIN	JANUARY MEAN
1	14.0	12.5	13.0	10.5	9.5	10.0	7.0	6.0	6.5	8.0	5.0	6.5
2	15.0	14.0	14.5	10.5	9.0	10.0	6.5	5.0	5.5	10.0	8.0	9.5
3	14.5	13.5	14.0	10.0	8.5	9.5	7.0	5.5	6.0	9.0	1.5	5.0
4	14.0	13.5	13.5	10.0	9.5	9.5	11.0	7.0	9.0	1.5	.0	.5
5	14.5	13.5	14.0	11.5	10.5	11.0	10.0	8.5	9.5	.5	.0	.5
6	15.0	14.5	14.5	11.5	11.0	11.0	8.5	6.5	7.5	1.0	.5	.5
7	15.0	13.5	14.0	11.5	10.5	11.0	7.5	6.5	7.0	3.5	.5	1.5
8	13.0	11.5	12.5	11.5	11.0	11.5	10.5	7.5	9.0	5.5	4.0	5.0
9	11.5	10.5	11.0	11.0	9.5	10.0	11.5	9.5	11.0	3.5	.5	2.0
10	11.0	10.0	10.5	10.0	8.5	9.5	9.5	4.5	6.5	.5	.0	.5
11	12.0	10.5	11.0	10.5	9.5	10.0	4.5	2.0	3.0	.5	.0	.5
12	13.5	12.0	13.0	10.5	10.0	10.0	2.5	1.0	2.0	.5	.0	.0
13	14.5	13.5	14.0	10.5	10.0	10.5	2.5	1.0	2.0	1.5	.5	1.0
14	15.0	14.5	14.5	11.5	10.5	11.0	3.0	2.0	2.5	3.0	1.5	2.5
15	14.5	12.0	13.0	12.0	11.5	12.0	3.5	2.0	3.0	2.5	1.0	1.5
16	12.0	10.5	11.0	12.0	10.5	11.5	4.5	2.0	4.0	2.0	.5	1.0
17	11.0	10.5	10.5	11.5	10.5	10.5	6.5	5.0	5.5	2.0	.5	1.5
18	10.5	9.5	10.0	13.0	11.0	12.0	4.5	4.0	4.5	2.0	.5	1.5
19	11.0	10.5	10.0	12.0	10.0	11.0	4.0	3.0	3.5	.5	.5	.5
20	11.5	11.0	11.0	9.5	8.0	9.0	4.0	3.0	3.0	1.5	.5	1.0
21	11.0	10.0	10.5	8.5	7.5	8.0	6.0	4.0	5.5	---	---	---
22	11.5	10.0	11.0	8.5	8.0	8.5	5.0	4.0	5.0	---	---	---
23	12.5	11.0	12.0	8.5	8.0	8.0	4.5	3.5	4.0	---	---	---
24	12.5	11.0	11.5	10.0	8.5	9.5	5.0	3.0	3.5	---	---	---
25	10.5	9.5	10.0	9.5	8.5	9.0	6.0	4.5	5.5	---	---	---
26	12.5	10.5	11.5	8.5	6.5	7.5	4.5	3.5	4.0	---	---	---
27	13.0	12.5	13.0	6.5	5.0	5.5	4.0	2.0	3.0	---	---	---
28	12.0	11.0	11.5	6.0	5.5	6.0	2.0	.5	1.0	---	---	---
29	10.5	9.5	10.0	6.5	5.5	6.0	.5	.0	.5	---	---	---
30	10.0	9.5	9.5	7.5	6.5	7.0	2.0	.0	1.0	---	---	---
31	11.0	9.5	10.0	---	---	---	4.5	2.0	3.0	---	---	---
MONTH	15.0	9.5	12.0	13.0	5.0	9.5	11.5	.0	4.[illegible]	10.0	.0	2.0

01411000 GREAT EGG HARBOR RIVER AT FOLSOM, NJ--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---									
2	---	---	---									
3	---	---	---									
4	---	---	---									
5	---	---	---									
6	---	---	---									
7	---	---	---									
8	---	---	---									
9	---	---	---									
10	---	---	---									
11	---	---	---									
12	.5	.5	---									
13	.5	.5	.5									
14	.5	.5	.5									
15	.5	.5	.5									
16	---	---	---									
17	---	---	---									
18	---	---	---									
19	---	---	---									
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27	---	---	---									
28	---	---	---									
29	---	---	---									
30	---	---	---									
31	---	---	---									
MONTH	.5	.5	.5									

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1				---	---	---	22.0	20.5	21.0	---	---	---
2				---	---	---	22.0	21.0	21.5	---	---	---
3				---	---	---	22.0	20.5	21.0	---	---	---
4				---	---	---	22.0	20.5	21.0	---	---	---
5				---	---	---	22.0	20.0	21.0	---	---	---
6				---	---	---	22.0	20.5	21.0	---	---	---
7				---	---	---	21.5	20.0	21.0	---	---	---
8				---	---	---	21.5	20.0	21.0	---	---	---
9				---	---	---	21.5	20.0	21.0	---	---	---
10				---	---	---	22.0	20.0	21.0	15.5	13.0	---
11				19.0	16.5	---	21.0	20.5	20.5	16.0	13.5	14.5
12				19.5	17.5	18.5	20.5	17.5	18.5	16.0	13.5	14.5
13				20.0	17.5	18.5	18.5	16.5	17.5	15.5	13.0	14.5
14				20.5	18.5	19.5	20.0	17.0	18.0	16.0	14.5	---
15				21.0	18.5	19.5	19.0	18.0	18.5	---	---	---
16				21.0	19.5	20.0	18.5	17.0	17.5	---	---	---
17				21.5	19.5	20.5	18.0	16.0	17.0	---	---	---
18				21.0	19.5	20.5	17.5	16.0	16.5	---	---	---
19				20.5	19.0	20.0	18.0	16.5	17.0	---	---	---
20				21.0	18.5	20.0	19.0	17.5	18.0	---	---	---
21				21.0	19.5	20.5	18.5	17.5	17.5	---	---	---
22				20.5	19.0	20.0	18.5	17.0	17.5	---	---	---
23				20.0	17.5	19.0	19.0	17.0	18.0	---	---	---
24				19.5	16.0	18.0	19.5	18.0	18.5	---	---	---
25				20.0	18.0	18.5	20.0	18.5	19.5	---	---	---
26				21.5	17.5	19.0	20.0	19.0	19.5	---	---	---
27				21.5	20.0	20.5	20.5	19.0	19.5	---	---	---
28				21.5	19.5	20.5	---	---	---	---	---	---
29				21.5	20.0	20.5	---	---	---	---	---	---
30				20.5	19.5	20.0	---	---	---	---	---	---
31				21.0	20.0	20.5	---	---	---	---	---	---
MONTH				21.5	16.0	19.5	22.0	16.0	19.0	16.0	13.0	14.5

01411000 GREAT EGG HARBOR RIVER AT FOLSOM, NJ--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		OCTOBER			NOVEMBER			DECEMBER	
1	42	7	.78	42	2	.23	77	6	1.2
2	46	7	.86	42	2	.23	81	4	.90
3	46	7	.87	42	2	.22	78	4	.84
4	46	8	.99	42	2	.23	81	5	1.1
5	47	8	1.0	43	3	.34	90	5	1.2
6	47	8	1.0	43	4	.46	103	6	1.7
7	46	7	.86	43	4	.46	115	5	1.6
8	43	7	.83	43	3	.35	110	5	1.5
9	42	7	.80	43	3	.35	106	5	1.3
10	42	7	.79	42	5	.53	113	6	1.9
11	42	8	.87	42	6	.68	128	6	2.1
12	40	8	.86	42	7	.78	132	5	1.7
13	40	9	.97	42	7	.79	120	3	1.0
14	40	10	1.1	42	6	.68	110	2	.59
15	40	10	1.1	42	6	.68	96	2	.52
16	40	9	.94	43	7	.78	84	2	.46
17	45	7	.81	45	6	.71	80	3	.64
18	47	4	.47	50	5	.67	80	3	.65
19	46	4	.48	55	4	.58	78	3	.62
20	45	5	.61	55	3	.42	73	2	.40
21	43	6	.71	52	2	.28	75	2	.40
22	42	7	.79	50	4	.49	80	2	.43
23	42	8	.85	47	4	.51	81	2	.44
24	39	7	.69	47	4	.51	80	2	.43
25	39	9	.92	49	5	.65	95	3	.75
26	39	8	.88	47	5	.63	120	4	1.3
27	40	7	.76	49	4	.52	140	3	1.1
28	43	6	.69	58	4	.62	129	2	.70
29	43	5	.58	64	5	.85	115	2	.61
30	43	4	.46	70	6	1.1	99	1	.27
31	43	3	.34	---	---	---	87	2	.39
TOTAL	1328	---	24.66	1416	---	16.33	3036	---	28.74

01411000 GREAT EGG HARBOR RIVER AT FOLSOM, NJ--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JANUARY			FEBRUARY			MARCH	
1	84	3	.63	144	4	1.5	495	7	9.8
2	92	3	.81	128	4	1.4	363	6	6.1
3	123	3	1.0	117	5	1.6	283	5	3.9
4	162	4	1.5	110	5	1.5	233	5	3.1
5	163	3	1.2	105	4	1.1	200	4	2.2
6	146	3	1.2	100	4	1.1	217	4	2.3
7	129	2	.70	90	4	.96	296	5	3.8
8	141	3	1.1	93	3	.75	357	6	5.4
9	188	4	2.0	90	3	.71	326	6	5.3
10	208	3	1.7	93	2	.50	274	5	3.7
11	188	2	1.1	84	2	.48	238	4	2.6
12	155	2	1.0	80	4	.78	217	4	2.3
13	135	3	1.1	84	4	.90	206	5	2.7
14	122	2	.66	81	4	.87	191	5	2.6
15	123	2	.63	81	3	.66	173	6	2.8
16	123	1	.38	84	3	.68	157	6	2.5
17	116	3	.92	83	3	.67	144	7	2.7
18	106	6	1.7	78	3	.63	134	6	2.1
19	99	8	2.0	84	3	.68	128	4	1.5
20	89	7	1.7	83	4	.89	122	3	1.0
21	154	7	2.9	86	3	.77	116	3	.94
22	371	8	8.2	92	5	1.1	113	3	.89
23	448	10	12	102	5	1.4	109	2	.59
24	405	8	9.0	138	5	2.0	115	2	.61
25	363	5	4.6	279	10	7.7	138	3	1.1
26	332	4	3.6	593	21	35	186	4	2.0
27	296	3	2.5	751	17	35	201	3	1.6
28	254	3	2.1	681	12	22	175	3	1.3
29	218	3	1.8	---	---	---	149	1	.50
30	189	3	1.5	---	---	---	131	2	.65
31	165	3	1.3	---	---	---	120	2	.65
TOTAL	5887	---	72.53	4614	---	123.33	6307	---	79.23

01411000 GREAT EGG HARBOR RIVER AT FOLSOM, NJ--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1	116	3	.98	134	4	1.4	125	17	5.7
2	113	5	1.4	116	3	.94	126	15	5.1
3	116	6	1.9	103	2	.56	123	13	4.5
4	122	8	2.6	98	1	.26	141	15	5.6
5	129	8	2.8	96	1	.26	170	16	7.3
6	132	9	3.3	95	1	.26	179	16	7.6
7	125	9	3.0	92	2	.50	160	14	6.1
8	116	9	2.8	89	2	.48	137	14	5.2
9	110	8	2.4	84	2	.45	160	14	6.0
10	116	7	2.2	81	2	.44	144	12	4.7
11	128	6	2.1	81	3	.66	119	10	3.2
12	132	5	1.8	90	3	.73	149	9	3.5
13	125	6	2.0	92	2	.50	203	11	6.2
14	126	6	2.0	122	4	1.3	193	10	5.3
15	143	6	2.3	166	6	2.7	152	9	3.7
16	165	7	3.1	168	6	2.7	125	8	2.7
17	155	7	2.9	135	5	1.8	113	7	2.1
18	138	8	2.9	113	4	1.2	125	8	2.7
19	122	7	2.3	117	4	1.3	126	8	2.7
20	110	6	1.8	175	5	2.4	112	7	2.1
21	103	5	1.4	208	6	3.4	98	8	2.1
22	99	4	1.1	193	8	4.2	89	9	2.2
23	96	3	.77	165	10	4.5	86	8	1.9
24	93	2	.51	144	13	4.9	92	8	2.0
25	93	2	.50	165	11	4.9	95	7	1.8
26	102	2	.55	213	12	6.9	90	6	1.5
27	123	3	.98	249	14	9.4	84	6	1.4
28	155	4	1.8	215	12	7.0	78	7	1.5
29	173	6	2.7	173	10	4.7	75	8	1.6
30	157	5	2.1	147	10	4.0	72	9	1.7
31	---	---	---	131	19	6.7	---	---	---
TOTAL	3733	---	58.99	4250	---	81.44	3741	---	109.7

01411000 GREAT EGG HARBOR RIVER AT FOLSOM, NJ--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JULY			AUGUST			SEPTEMBER	
1	70	10	1.9	55	7	1.1	115	5	1.6
2	72	11	2.1	53	7	1.0	107	7	2.1
3	73	10	2.0	69	10	1.8	92	10	2.5
4	72	9	1.7	89	11	2.6	75	9	1.8
5	72	8	1.5	95	9	2.3	69	7	1.4
6	70	7	1.3	83	8	1.8	86	10	2.3
7	67	7	1.3	70	7	1.3	117	10	3.1
8	64	8	1.4	61	6	1.0	149	7	2.7
9	61	9	1.5	55	8	1.2	132	5	1.8
10	60	10	1.6	52	11	1.6	110	5	1.4
11	58	9	1.5	59	12	1.9	92	5	1.2
12	58	8	1.2	73	12	2.4	75	4	.82
13	55	8	1.2	95	11	2.8	67	4	.73
14	53	7	1.0	103	7	2.0	64	4	.70
15	52	6	.84	102	7	1.9	64	5	.86
16	52	6	.87	92	6	1.5	67	4	.73
17	52	8	1.2	73	6	1.2	64	4	.69
18	55	12	1.7	64	6	1.0	59	5	.80
19	69	15	2.7	66	5	.88	56	5	.77
20	83	16	3.5	67	4	.73	55	6	.87
21	80	14	3.0	64	4	.70	52	6	.85
22	75	12	2.4	61	5	.83	70	6	1.1
23	67	10	1.9	58	5	.78	98	6	1.6
24	83	10	2.3	58	4	.62	109	7	2.1
25	87	8	1.8	59	5	.84	115	7	2.1
26	78	7	1.5	64	8	1.3	102	6	1.6
27	77	7	1.4	72	10	2.0	84	4	.94
28	70	7	1.3	102	11	3.1	72	4	.78
29	62	7	1.2	129	10	3.3	69	4	.74
30	59	8	1.3	138	6	2.4	81	4	.88
31	58	8	1.2	125	6	2.0	---	---	---
TOTAL	2064	---	51.31	2406	---	49.88	2567	---	41.56
YEAR	41349		737.70						

01411110 GREAT EGG HARBOR RIVER AT WEYMOUTH, NJ

LOCATION.--Lat 39°30'50", long 74°46'47", Atlantic County, Hydrologic Unit 02040302, at bridge on U.S. Route 322 in Weymouth, 0.5 mi (0.8 km) upstream from Deep Run, and 20.9 mi (33.6 km) upstream from mouth.

DRAINAGE AREA.--154 mi^2 (399 km^2).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1975 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
JAN 31...	1105	78	4.5	3.0	12.0	1.1	E50	E23	10	2.3
APR 11...	1030	56	5.5	9.0	9.9	2.4	33	9	10	2.1
JUN 12...	0945	43	4.1	17.5	8.0	1.5	5400	220	8	1.7
JUL 11...	1030	52	4.2	19.5	7.5	1.4	--	--	10	2.0
AUG 13...	1230	46	3.8	19.0	7.7	1.2	920	1600	9	1.9

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
JAN 31...	1.1	4.1	1.1	0	0	0	--	9.2	7.3	.0
APR 11...	1.1	3.8	1.1	2	0	2	--	8.0	6.9	.0
JUN 12...	.8	3.5	.9	0	0	0	.0	6.3	6.5	.0
JUL 11...	1.1	4.8	1.1	0	0	0	--	5.7	8.1	.0
AUG 13...	1.0	3.5	1.1	0	0	0	--	7.8	6.3	.0

DATE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	PHOSPHATE, TOTAL (MG/L AS PO4)	PHOSPHATE, ORTHO, DISSOLVED (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
JAN 31...	4.5	44	<1.0	<.10	--	.45	.02	.02	8.8
APR 11...	2.4	40	<1.0	<.10	--	.50	.04	<.01	6.4
JUN 12...	5.0	51	<1.0	.20	1.8	2.0	.37	.19	17
JUL 11...	5.7	50	<1.0	<.10	--	.70	.28	.28	9.8
AUG 13...	6.5	54	<1.0	.15	.45	.60	.26	.16	12

01411110 GREAT EGG HARBOR RIVER AT WEYMOUTH, NJ--Continued

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
JUN 12...	0945	290	5	0	80	0	20	34

DATE	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	PHENOLS (UG/L)
JUN 12...	2400	6	10	<.5	16	0	30	0

01411140 DEEP RUN AT WEYMOUTH, NJ

LOCATION.--Lat 39°30'26", long 74°46'56", Atlantic County, Hydrologic Unit 02040302, at bridge on State Route 559, 0.2 mi (0.3 km) upstream from mouth, and 0.6 mi (1.0 km) south of intersection of U.S. Route 322 with State Route 559 at Weymouth.

DRAINAGE AREA.--20.0 mi^2 (51.8 km^2).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1975 to 1979 (discontinued).

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)
OCT									
10...	1245	51	5.8	10.0	10.2	5.0	5	49	8

DATE	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)
OCT									
10...	1.9	.9	3.3	1.1	4	0	3	7.9	5.2

DATE	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN,AMMONIA + ORGANIC TOTAL (MG/L AS N)	PHOSPHATE, TOTAL (MG/L AS PO4)	PHOSPHATE, ORTHO, DISSOLVED (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT									
10...	.0	9.3	40	<1.0	<.10	1.1	.02	.02	5.3

01411170 GREAT EGG HARBOR RIVER AT MAYS LANDING, NJ

LOCATION.--Lat 39°27'13", long 74°44'04", Atlantic County, Hydrologic Unit 02040302, at bridge on State Route 559 in Mays Landing, at outlet of Lake Lenape, 0.4 mi (0.6 km) west of intersection of State Route 50 with U.S. Route 40 in Mays Landing.

DRAINAGE AREA.--205 mi² (531 km²).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1975 to 1979 (discontinued).

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
OCT										
11...	1100	53	5.7	15.0	9.7	.7	13	<2	10	2.0

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
OCT										
11...	1.1	4.2	1.3	2	0	2	.0	6.1	7.1	.0

DATE	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHATE, TOTAL (MG/L AS PO4)	PHOSPHATE, ORTHO, DISSOLVED (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT										
11...	6.6	39	5.6	.08	3.7	3.8	9.4	.30	.15	5.0

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)
OCT							
11...	1100	130	1	0	<10	38	110

DATE	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	PHENOLS (UG/L)
OCT						
11...	20	<.5	26	0	30	0

01411300 TUCKAHOE RIVER AT HEAD OF RIVER, NJ

LOCATION.--Lat 39°18'25", long 74°49'15", Cape May County, Hydrologic Unit 02040302, on right bank at highway bridge on State Route 49, 0.2 mi (0.3 km) upstream from McNeals Branch, 0.4 mi (0.6 km) southeast of Head of River, and 3.7 mi (6.0 km) west of Tuckahoe.

DRAINAGE AREA.--30.8 mi² (79.8 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--December 1969 to current year.

REVISED RECORDS.--WDR-NJ-1: 1975, 76 (M).

GAGE.--Water-stage recorder and wooden control. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records good. Occasional regulation by ponds above station.

AVERAGE DISCHARGE.--9 years, 47.1 ft³/s (1.334 m³/s), 20.79 in/yr (528 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 385 ft³/s (10.9 m³/s) Mar. 7, 1979, elevation, 6.23 ft (1.899 m); minimum daily, 7.3 ft³/s (0.21 m³/s) Aug. 7, 1976.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 385 ft³/s (10.9 m³/s) Mar 7, elevation, 6.23 ft (1.899 m); minimum 16 ft³/s (0.45 m³/s) Oct. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	20	48	52	80	253	78	83	63	53	26	27
2	28	20	38	62	72	177	78	74	72	58	28	26
3	28	20	34	102	68	150	82	69	74	52	70	24
4	24	21	55	88	65	128	90	66	102	48	77	23
5	23	26	86	67	62	119	94	65	156	50	56	24
6	22	24	88	58	55	205	89	62	139	47	41	56
7	20	23	65	62	55	376	80	60	104	42	35	74
8	19	22	50	102	55	347	75	58	85	39	30	48
9	18	22	50	116	53	280	76	56	75	38	27	37
10	18	22	68	88	51	190	94	55	65	38	25	32
11	18	23	62	70	49	172	86	55	52	46	36	28
12	18	23	50	60	47	170	80	56	76	44	56	26
13	18	23	43	62	47	154	80	58	74	40	70	24
14	19	22	41	84	47	136	92	86	70	39	52	27
15	19	21	38	83	48	119	104	89	57	38	41	23
16	19	22	35	68	47	108	94	75	54	37	35	22
17	33	24	41	60	46	102	82	63	55	37	30	21
18	35	24	39	57	44	94	67	58	65	42	28	20
19	27	23	35	50	46	91	65	60	62	64	31	19
20	24	22	34	50	47	87	66	63	57	48	30	19
21	22	21	46	164	51	84	65	60	53	37	29	19
22	21	21	47	233	73	83	63	58	50	32	29	45
23	20	21	41	178	83	80	62	55	52	30	27	68
24	20	27	41	142	129	87	60	55	53	37	32	51
25	20	25	111	155	314	121	62	83	53	35	30	37
26	19	22	127	140	331	112	66	94	49	30	33	32
27	20	27	89	121	328	100	120	75	47	28	36	29
28	20	42	65	108	304	89	118	63	45	27	43	27
29	20	41	54	102	---	83	107	58	43	25	40	25
30	20	52	48	95	---	79	94	57	42	26	32	27
31	20	---	47	86	---	77	---	55	---	25	29	---
TOTAL	670	746	1716	2965	2697	4453	2469	2024	2044	1232	1184	960
MEAN	21.6	24.9	55.4	95.6	96.3	144	82.3	65.3	68.1	39.7	38.2	32.0
MAX	35	52	127	233	331	376	120	94	156	64	77	74
MIN	18	20	34	50	44	77	60	55	42	25	25	19
CFSM	.70	.81	1.80	3.10	3.13	4.68	2.67	2.12	2.21	1.29	1.24	1.04
IN.	.81	.90	2.07	3.58	3.26	5.38	2.98	2.44	2.47	1.49	1.43	1.16

CAL YR 1978 TOTAL 20179 MEAN 55.3 MAX 244 MIN 16 CFSM 1.80 IN 24.37
WTR YR 1979 TOTAL 23160 MEAN 63.5 MAX 376 MIN 18 CFSM 2.06 IN 27.97

01411300 TUCKAHOE RIVER AT HEAD OF RIVER, NJ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1975 to current year.

COOPERATION.--Analyses of fecal coliform and fecal streptococci by the MPN method, and water-phase nutrients were performed by the New Jersey Department of Health, Division of Laboratories and Epidemiology.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, EC BROTH (MPN)	STREPTOCOCCI FECAL (MPN)	HARDNESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
OCT 11...	1330	17	27	5.6	11.5	10.0	.7	23	<2	4	.8
FEB 13...	1115	47	47	4.3	.5	13.6	1.4	6	<2	5	.9
APR 04...	1015	89	47	4.4	10.0	9.6	.6	8	21	4	.7
JUN 11...	1300	62	25	4.5	19.0	6.6	2.7	46	130	3	.6
JUL 05...	1100	53	44	5.1	17.0	8.0	.6	79	350	4	.7
AUG 02...	1100	24	32	4.5	23.0	6.4	1.0	79	79	4	.6
SEP 26...	1030	31	37	4.7	16.0	8.3	.8	130	10	4	.7

DATE	MAGNESIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTASSIUM, DIS-SOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLORIDE, DIS-SOLVED (MG/L AS CL)	FLUORIDE, DIS-SOLVED (MG/L AS F)
OCT 11...	.6	2.4	.7	2	0	2	--	2.8	4.0	.0
FEB 13...	.6	2.3	.6	0	0	0	--	4.6	4.7	.0
APR 04...	.5	2.3	.5	0	0	0	--	5.7	5.0	.0
JUN 11...	.4	1.8	.3	0	0	0	.0	4.0	4.5	.0
JUL 05...	.5	2.1	.5	0	0	0	--	4.5	4.5	.0
AUG 02...	.5	2.2	.5	0	0	0	--	2.4	4.4	.0
SEP 26...	.5	2.4	.5	0	0	0	--	5.0	5.0	.0

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHATE, TOTAL (MG/L AS PO4)	PHOSPHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 11...	4.8	22	<1.0	.08	3.7	3.8	--	.61	.08	7.6
FEB 13...	7.2	30	<1.0	<.10	--	.60	--	.07	.07	4.6
APR 04...	3.7	32	<1.0	<.10	--	.40	--	.03	.03	7.3
JUN 11...	5.2	36	<1.0	<.10	--	2.8	--	.06	.04	10
JUL 05...	6.1	34	.05	<.10	--	2.2	2.2	.08	.04	9.9
AUG 02...	5.8	38	.17	<.10	--	1.0	1.2	.03	.02	8.1
SEP 26...	5.1	30	.03	.60	.00	.60	.63	.01	.01	4.8

01411300 TUCKAHOE RIVER AT HEAD OF RIVER, NJ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)
JUN								
11...	1300	260	3	0	50	0	30	2

DATE	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	PHENOLS (UG/L)
JUN								
11...	810	4	0	<.5	4	0	30	0

As the number of streams on which streamflow information is likely to be desired far exceeds the number of stream-gaging stations feasible to operate at one time, the Geological Survey collects limited streamflow data at sites other than stream-gaging stations. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic analyses, the site at which the data are collected is called a partial-record station. Data collected at these partial-record stations are usable in low-flow or floodflow analyses, depending on the type of data collected. In addition, discharge measurements are made at other sites not included in the partial-record program. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Records collected at partial-record stations are presented in two tables. The first is a table of discharge measurements at low-flow partial-record stations, and the second is a table of annual maximum stage and discharge at crest-stage stations. Discharge measurements made at miscellaneous sites for both low flow and high flow are given in a third table.

Low-flow partial-record stations

Measurements of streamflow in New Jersey made a low-flow partial-record stations are given in the following table. Most of these measurements were made during periods of base flow when streamflow is primarily from ground-water storage. These measurements, when correlated with the simultaneous discharge of a nearby stream where continuous records are available, will give a picture of the low-flow potentiality of a stream. The column headed "Period of record" shows the water years in which measurements were made at the same, or practically the same, site.

Discharge measurements made at low-flow partial-record stations during water year 1979

Station number	Station name	Location	Drainage area (mi^2)	Period of record	Measurements	
					Date	Discharge (ft^3/s)
		Hudson River basin				
01367620	Wallkill River at outflow of Lake Mohawk at Sparta, NJ	Lat 41°01'59", long 74°37'36", Sussex County, at bridge on West Shore Trail, at Sparta, 200 ft (61 m) downstream from outflow of Lake Mohawk, and 1.2 mi (1.9 km) southwest of Sparta Station.	4.38 (11.34 km^2)	1979	4-17-79 9-11-79	11 7.4
		Hackensack River basin				
01378410	Dwars Kill at Norwood, NJ	Lat 40°59'01", long 73°57'35", Bergen County, at bridge on Blanche Avenue at Norwood, 0.2 mi (0.3 km) upstream from mouth.	4.23 (10.96 km^2)	1973-79	9-11-79	1.2
		Passaic River basin				
01381200	Rockaway River at Pine Brook, NJ	Lat 40°51'29", long 74°20'53", Morris County, at bridge on U.S. Route 46, 0.9 mi (1.4 km) west of Pine Brook, and 1.1 mi (1.8 km) upstream from Whippany River.	136 (352 km^2)	1963-70, 1972-73, 1979	7-11-79 8-29-79	55 27
01381800	Whippany River near Pine Brook, NJ	Lat 40°50'42", long 74°20'51", Morris County, at bridge on Edwards Road, 0.3 mi (0.5 km) above mouth, and 1.4 mi (2.1 km) southwest of Pine Brook.	68.5 (177.4 km^2)	1963-68, 1973, 1979	8-29-79	47
01382870	Belcher Creek at Stowaway Road at West Milford, NJ	Lat 41°07'27", long 74°22'48", Passaic County, at bridge on Stowaway Road in West Milford, at entrance to Pinecliff Lake, 2.8 mi (4.5 km) upstream from mouth.	2.44 (6.32 km^2)	1973-79	9-12-79	3.9
01382880	Belcher Creek tributary at West Milford, NJ	Lat 41°08'06", long 74°22'34", Passaic County, at bridge on Bearfort Road in West Milford, 150 ft (46 m) upstream from mouth, and 3.9 mi (6.3 km) west of Hewitt.	0.61 (1.58 km^2)	1973-77, 1979	9-12-79	1.2
01382890	Belcher Creek at West Milford, NJ	Lat 41°08'15", long 74°22'04", Passaic County, at bridge on Union Valley Road, 150 ft (46 m) downstream from Pinecliff Lake Dam, 0.4 mi (0.6 km) from West Milford, 1.6 mi (2.6 km) from mouth.	7.27 (18.83 km^2)	1973-79	9-12-79	9.9
01382910	Morsetown Brook at West Milford, NJ	Lat 41°08'13", long 74°21'18", Passaic County, at bridge on Lincoln Avenue, 0.4 mi (0.6 km) upstream from mouth, 0.9 mi (1.4 km) northeast of West Milford.	1.31 (3.39 km^2)	1973-79	9-12-79	.82
01382960	Green Brook near West Milford, NJ	Lat 41°09'09", long 74°21'34", Passaic County, at bridge on Union Valley Road, 0.4 mi (0.6 km) upstream from mouth, 1.6 mi (2.6 km) north of West Milford.	1.47 (3.81 km^2)	1973-79	9-12-79	4.9

Discharge measurements made at low-flow partial-record stations during water year 1979--Continued

Station number	Station name	Location	Drainage area (mi²)	Period of record	Measurements Date	 Discharge (ft³/s)
		Passaic River basin--Continued				
01382990	Cooley Brook near West Milford, NJ	Lat 41°09'16", long 74°21'27", Passaic County, at bridge on Union Valley Road, 0.1 mi (0.2 km) upstream from mouth, 1.8 mi (2.9 km) north of West Milford.	1.34 (3.47 km²)	1973-79	9-12-79	4.6
		Rahway River basin				
01396030	South Branch Rahway River at Colonia, NJ	Lat 40°34'57", long 74°18'04", Middlesex County, at bridge on Dover Road in Colonia, 0.7 mi (1.1 km) northeast of Iselin, and 3.5 mi (5.6 km) northeast of Metuchen.	9.41 (24.37 km²)	1979	4-24-79	4.1
		Raritan River basin				
01396590	Spruce Run near High Bridge, NJ	Lat 40°40'26", long 74°55'04", Hunterdon County, at bridge on Van Syckels Corner Road, at inlet to Spruce Run Reservoir, 1.3 mi (2.1 km) northwest of High Bridge.	13.1 (33.9 km²)	1973-79	9-12-79	11
01396670	Mulhockaway Creek tributary at Van Syckel, NJ	Lat 40°39'05", long 74°58'13", Hunterdon County, at bridge on secondary road at Van Syckel, 0.4 mi (0.6 km) upstream from mouth.	2.76 (7.15 km²)	1973-79	9-12-79	1.6
01397100	Prescott Brook at Round Valley, NJ	Lat 40°36'28", long 74°50'54", Hunterdon County, at bridge on county road in McPherson (in Round Valley), 2.3 mi (3.7 km) north of Stanton, and 3.4 mi (5.5 km) upstream from mouth.	4.61 (11.94 km²)	1958-63, 1979	5-11-79	1.1
01399194	Succasunna Brook near Succasunna, NJ	Lat [illegible]0°51'02", long 74°38'25", [illegible] County, at extension [illegible] Midland Road in Succasunna, 0.3 mi (0.5 km) upstream from Lamington River, 2.2 mi (3.5 km) north of Ironia, and 3.4 mi ([illegible] km) east of Flanders.	1.72 (4.45 km²)	1977-79	10-18-78 6-22-79 9-12-79	.57 3.1 1.6
01399198	Lamington River tributary near Ironia, NJ	Lat 40°50'28", long 74°38'16", Morris County, at bridge near Ironia, 0.4 mi (0.6 km) upstream from Lamington River, 1.6 mi (2.6 km) north of Ironia, and 2.4 mi (3.9 km) south of Succasunna.	0.64 (1.66 km²)	1977-79	10-18-78 9-12-79	.17 .91
01399600	South Branch Rockaway Creek tributary at Lebanon, NJ	Lat 40°38'05", long 74°49'58", Hunterdon County, at bridge on secondary road, 0.1 mi (0.2 km) south of tracks of Central Railroad of New Jersey, 0.5 mi (0.8 km) southeast of Lebanon, and 0.6 mi (1.0 km) above mouth.	1.02 (2.64 km²)	1958, 1960-64, 1979	5-09-79	14
01401400	Heathcote Brook at Kingston, NJ	Lat 40°22'10", long 75°36'59", Middlesex County, at bridge on Mapleton Road, at Penn Central railroad bridge, 0.3 mi (0.5 km) south of Kingston, and 0.4 mi (0.6 km) upstream from mouth.	9.00 (23.31 km²)	1979	5-09-79	4.0
01403330	Bound Brook at South Plainfield, NJ	Lat 40°34'43", long 74°24'45", Middlesex County, at bridge on Hamilton Road in South Plainfield, 0.5 mi (0.8 km) upstream from Cedar Brook, and 1.9 mi (3.1 km) east of New Market.	9.55 (24.73 km²)	1979	4-18-79 9-12-79	13 5.9
01403350	Cedar Brook at South Plainfield, NJ	Lat 40°34'57", long 74°24'53", Middlesex County, at bridge on Lakeview Road in South Plainfield, 0.4 mi (0.6 km) upstream from mouth, and 2.0 mi (3.2 km) east of Dunellen.	7.10 (18.39 km²)	1979	4-18-79 9-12-79	.96 .53
01404060	Ambrose Brook at Middlesex, NJ	Lat 40°34'03", long 74°31'02", Middlesex County, at Dam, 900 ft (270 m) upstream from bridge on State Route 18 in Middlesex, and 0.7 mi (1.1 km) upstream from mouth.	13.9 (36.0 km²)	1979	4-18-79 9-12-79	14 5.3

Discharge measurements made at low-flow partial-record stations during water year 1979--Continued

Station number	Station name	Location	Drainage area (mi^2)	Period of record	Measurements	
					Date	Discharge (ft^3/s)
		Raritan River basin--Continued				
01404180	Mill Brook at Highland Park, NJ	Lat 40°30'23", long 74°25'51", Middlesex County, at bridge on Harrison Street in Highland Park, 0.7 mi (1.2 km) upstream from mouth, and 0.9 mi (1.4 km) northeast of New Brunswick.	1.41 (3.65 km^2)	1979	4-24-79 9-12-79	.92 .79
01405240	Matchaponix Brook near Englishtown, NJ	Lat 40°19'21", long 74°21'35", Middlesex County, at bridge on Union Hill Road, 1.7 mi (2.7 km) north of Englishtown, and 2.8 mi (4.6 km) northwest of Gordons Corner.	29.1 (75.4 km^2)	1979	3-27-79 5-08-79 8-02-79 9-11-79	46 31 21 30
01405285	Barclay Brook near Englishtown, NJ	Lat 40°20'53", long 74°21'27", Middlesex County, at bridge on State Route 527 (Old Bridge-Englishtown Road), 0.6 mi (1.0 km) south of Redshaw Corner, 0.9 mi (1.4 km) upstream from mouth, and 3.5 mi (5.6 km) north of Englishtown.	4.94 (12.80 km^2)	1979	3-27-79 5-02-79 5-08-79 6-21-79 8-02-79 9-11-79	9.8 5.7 3.1 3.8 2.0 3.2
01405335	Manalapan Brook near Manalapan, NJ	Lat 40°16'45", long 74°22'53", Monmouth County, at bridge on South Main Street, 1.8 mi (2.9 km) northeast of Manalapan, 1.8 mi (2.9 km) southwest of Englishtown, and 5.6 mi (9.0 km) southeast of Jamesburg.	16.0 (43.8 km^2)	1979	5-09-79 9-11-79	20 14
		Navesink River basin				
01407450	Mine Brook at Colts Neck, NJ	Lat 40°17'29", long 74°10'11", Monmouth County, at bridge on Creamery Road, 0.4 mi (0.6 km) northeast of Colts Neck, and 0.5 mi (0.8 km) upstream from Yellow Brook.	5.48 (14.19 km^2)	1969-74, 1979	5-09-79 7-12-79	6.9 5.0
		Mullica River basin				
*01409375	Mullica River near Atco, NJ	Lat 39°47'08", long 74°51'38", Camden County, 50 ft (15 m) downstream from Jackson-Medford Road and 1.8 mi (2.9 km) northeast of Pennsylvania-Reading Seashore Lines railroad and Atco Street in Atco.	3.22 (8.34 km^2)	1975-79	9-11-79	2.8
01409390	Mullica River at Atsion, NJ	Lat 39°44'19", long 74°43'20", Burlington County, at Central Railroad of New Jersey bridge in Atsion, 500 ft (152 m) downstream from Wesickaman Creek, and 0.3 mi (0.5 km) southeast of Atsion.	33.1 (85.7 km^2)	1975-79	9-11-79	46
01409395	Mullica River tributary near Atsion, NJ	Lat 39°41'29", long 74°40'53", Atlantic County, 0.2 mi (0.3 km) upstream from mouth, 3.8 mi (6.1 km) northwest of Batsto, and 4.2 mi (6.8 km) southeast of Atsion.	4.10 (10.62 km^2)	1975-79	8-17-79 9-11-79	23 26
01409402	Hays Mill Creek near Chesilhurst, NJ	Lat 39°45'02", long 74°50'28", Camden County, at bridge on Tremont Avenue, 0.5 mi (0.8 km) upstream from Cooper Branch, 2.0 mi (3.2 km) northeast of Chesilhurst and 2.8 mi (4.5 km) southeast of Atco.	7.13 (18.47 km^2)	1974-79	8-17-79 9-11-79	10 8.6
*01409403	Wildcat Branch at Chesilhurst, NJ	Lat 39°44'04", long 74°51'33", Camden County, at culvert on Old White Horse Pike, 0.6 mi (1.0 km) north of Chesilhurst, 1.5 mi (2.4 km) upstream from mouth, and 2.9 mi (4.6 km) southeast of Atco.	1.03 (2.67 km^2)	1974-79	9-12-79	.26
01409404	Sleeper Branch near Atsion, NJ	Lat 39°42'46", long 74°44'36", Atlantic County, at bridge on U.S. Route 206, 0.1 mi (0.2 km) upstream from Clark Branch, 0.6 mi (1.0 km) south of Dutchtown, and 2.1 mi (3.4 km) south of Atsion.	18.2 (47.1 km^2)	1975-79	8-17-79 9-12-79	5.1 3.1

Discharge measurements made at low-flow partial-record stations during water year 1979--Continued

Station number	Station name	Location	Drainage area (mi^2)	Period of record	Measurements	
					Date	Discharge (ft^3/s)
		Mullica River basin--Continued				
01409405	Clark Branch near Atsion, NJ	Lat 39°42'42", long 74°44'39", Atlantic County, at bridge on U.S. Route 206, 0.1 mi (0.2 km) upstream from Sleeper Branch, 0.7 mi (1.1 km) south of Dutchtown, and 2.2 mi (3.5 km) south of Atsion.	7.12 (18.44 km^2)	1975-79	8-17-79 9-12-79	23 19
01409406	Sleeper Branch at Batsto, NJ	Lat 39°38'48", long 74°39'39", Atlantic County, at footbridge 600 ft (180 m) upstream from Mullica River, and 0.6 mi (1.0 km) northwest of Batsto.	36.1 (93.5 km^2)	1975-79	8-17-79 9-13-79	8.7 7.5
01409407	Pump Branch near Blue Anchor, NJ	Lat 39°42'22", long 74°53'04", Camden County, at highway bridge, 0.4 mi (0.6 km) upstream from Hobb Lake, and 1.2 mi (1.9 km) north of Blue Anchor.	6.20 (16.06 km^2)	1974-79	9-11-79	3.9
*01409409	Blue Anchor Brook near Blue Anchor, NJ	Lat 39°41'17", long 74°51'00", Camden County, on upstream left side of bridge on Spring Garden Road, 1.8 mi (2.9 km) east of Blue Anchor, 1.8 mi (2.9 km) north of Winslow, and 2.2 mi (3.5 km) upstream from Albertson Brook.	3.01 (7.80 km^2)	1974-79	9-12-79	2.0
01409410	Albertson Brook near Hammonton, NJ	Lat 39°41'41", long 74°45'21", Atlantic County, at bridge on U.S. Route 206, 3.1 mi (5.0 km) downstream from confluence of Pump Branch and Blue Anchor Brook, 3.5 mi (5.6 km) south of Atsion, and 5.2 mi (8.4 km) northeast of Hammonton.	19.3 (50.0 km^2)	1975-79	9-12-79	29
01409411	Nescochague Creek at Pleasant Mills, NJ	Lat 39°38'28", long 74°39'43", Atlantic County, at bridge on sand road in Pleasant Mills, 0.2 mi (0.3 km) upstream from Mullica River, and 0.6 mi (1.0 km) west of Batsto.	43.8 (113.4 km^2)	1975-79	9-13-79	55
01409575	Landing Creek at Philadelphia Avenue at Egg Harbor City, NJ	Lat 39°32'52", long 74°37'33", Atlantic County, at bridge on Philadelphia Avenue (State Route 563), 0.1 mi (0.2 km) upstream from Union Creek, 1.7 mi (2.7 km) northeast of intersection of Routes 30, 563, and 50 in Egg Harbor City, and 6.1 mi (9.8 km) upstream from mouth.	4.86 (12.59 km^2)	1974, 1976-79	9-11-79	5.3
01409730	West Branch Wading River near Chatsworth, NJ	Lat 39°45'43", long 74°32'27", Burlington County, at bridge on County Route 563, 0.6 mi (1.0 km) downstream from Pole Branch, and 2.9 mi (4.7 km) south of Chatsworth.	44.8 (116.0 km^2)	1975-79	9-12-79	68
01409780	Tulpehocken Creek near Jenkins, NJ	Lat 39°42'51", long 74°33'58", Burlington County, at bridge on Maxwell-Friendship Road, 0.2 mi (0.3 km) upstream from mouth, and 2.3 mi (3.7 km) northwest of Jenkins.	21.9 (56.7 km^2)	1975-79	9-13-79	17
01409970	Oswego River at Oswego Lake, NJ	Lat 39°43'53", long 74°29'31", Burlington County, at bridge on Little Hawkin Road at outlet of Oswego Lake, 0.6 mi (1.0 km) downstream from Breeches Branch, and 3.0 mi (4.8 km) northwest of Jenkins.	64.4 (116.8 km^2)	1975-79	9-14-79	58
		Great Egg Harbor River basin				
01410784	Great Egg Harbor River near Sicklerville, NJ	Lat 39°44'02", long 74°57'05", Camden County, at bridge on Sicklerville-New Freedom Road (Spur 536), 1.5 mi (2.4 km) northeast of Sicklerville.	15.1 (39.1 km^2)	1971-79	12-06-78 3-15-79 9-11-79 1-17-79 7-24-79	37 31 11 20 11
01410803	Fourmile Branch at Winslow Crossing, NJ	Lat 39°42'07", long 74°58'11", Camden County, 1.0 mi (1.6 km) south of Sicklerville and 2.0 mi (3.2 km) upstream from mouth.	6.22 (16.11 km^2)	1972-79	9-11-79	5.8

Discharge measurements made at low-flow partial-record stations during water year 1979--Continued

Station number	Station name	Location	Drainage area (mi²)	Period of record	Measurements	
					Date	Discharge (ft³/s)
		Great Egg Harbor River basin--Continued				
01411053	Hospitality Branch at Berryland, NJ	Lat 39°36'31", long 74°54'34", Gloucester County, at bridge on Piney Hollow Road, 0.3 mi (0.5 km) southwest of Berryland, 1.2 mi (1.9 km) upstream of Oak Branch and 3.4 mi (5.5 km) west of Folsom.	20.0 (51.8 km²)	1976-79	9-11-79	34
01411140	Deep Run at Weymouth, NJ	Lat 39°30'26", long 74°46'56", Atlantic County, at bridge on State Highway 559, 0.3 mi (0.5 km) upstream of mouth, and 0.5 mi (0.8 km) southwest of Weymouth.	20.0 (51.8 km²)	1976-79	9-11-79	30

* Also a crest-stage partial-record station.

CREST-STAGE PARTIAL RECORD STATIONS

The following table contains annual maximum discharges for crest-stage stations. A crest-stage gage is a device which will register the peak stage occurring between inspections of the gage. A stage-discharge relation for each gage is developed from discharge measurements made by indirect measurements of peak flow or by current meter. The date of the maximum discharge is not always certain but is usually determined by comparison with nearby continuous-record stations, weather records, or local inquiry. Only the maximum discharge for each water year is given. Information on some lower floods may have been obtained, and discharge measurements may have been made for purposes of establishing the stage-discharge relation, but these are not published herein. The years given in the period of record represent water years for which the annual maximum has been determined. The gage heights are heights on the upstream side of the bridge, above the dam or at the discontinued continuous-record gaging station unless otherwise noted.

ANNUAL MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (ft^3/s)
		Hackensack River basin					
*01377475	Musquapsink Brook near Westwood, NJ	Lat 40°59'41", long 74°03'42", Bergen County, at bridge on Pascack Road in Washington Borough, 1.5 mi (2.4 km) west of Westwood, and 5.3 mi (8.5 km) above mouth. Datum of gage before 1973 was 69.67 ft (21.235 m) National Geodetic Vertical Datum of 1929.	2.16 (5.59 km^2)	1965-79	d2-08-65 6-25-79	b0.95 1.69	225 96
01377490	Musquapsink Brook at Westwood, NJ	Lat 40°59'11", long 74°02'03", Bergen County, at footbridge at Bogert Pond, 8 ft (2 m) upstream from dam near intersection of Mill Street and First Avenue in Westwood. Datum of gage is 47.67 ft (14.530 m) National Geodetic Vertical Datum of 1929.	6.53 (16.91 km^2)	1966-79	1-25-79	1.93	400
*01378385	Tenakill Brook at Closter, NJ	Lat 40°58'29", long 73°58'06, Bergen County, at bridge on High Street in Closter, 0.7 mi (1.1 km) upstream from mouth. Datum of gage is 23.85 ft (7.270 m) National Geodetic Vertical Datum of 1929.	8.56 (22.17 km^2)	1965-79	1-25-79	b4.10	760
*01378590	Metzler Brook at Englewood, NJ	Lat 40°54'32", long 73°59'40", Bergen County, at bridge on Lantana Avenue in Englewood, and 1.6 mi (2.6 km) upstream from mouth. Datum of gage is 43.10 ft (13.137 m) National Geodetic Vertical Datum of 1929.	1.54 (3.99 km^2)	1965-79	1-25-79	b2.38	250
*01378615	Wolf Creek at Ridgefield, NJ	Lat 40°49'45", Long 74°00'14", Bergen County, at bridge on Clark Avenue in Ridgefield and 0.9 mi (1.4 km) upstream from mouth. Datum of gage is 12.1 ft (3.69 m) National Geodetic Vertical Datum of 1929.	1.18 (3.06 km^2)	1965-79	9-06-79	b5.12	425
		Passaic River basin					
01378690	Passaic River near Bernardsville, NJ	Lat 40°44'03", long 74°32'26", Somerset County, at bridge on U.S. Route 202, 1.8 mi (2.9 km) northeast of Bernardsville, and 3.0 mi (4.8 km) upstream from Great Brook. Datum of gage is 238.07 ft (72.564 m) National Geodetic Vertical Datum of 1929.	8.83 (22.87 km^2)	1968-79	1-25-79	b15.99	1,950

CREST-STAGE PARTIAL-RECORD STATIONS

ANNUAL MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS--Continued

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Annual maximum Date	 Gage height (feet)	 Discharge (ft^3/s)
		Passaic River basin--Continued					
01381900	Passaic River at Pine Brook, NJ	Lat 40°51'45", long 74°19'18", Morris County, at bridge on U.S. Route 46, 0.5 mi (0.8 km) east of Pine Brook, and 1.3 mi (2.1 km) downstream from Rockaway River. Datum of gage is 159.26 ft (48.542 m) National Geodetic Vertical Datum of 1929.	349 (904 km^2)	1966-75, 1979	1-25-79	b11.38	4,300
01387880	Pond Brook at Oakland, NJ	Lat 41°01'36", long 74°14'04", Bergen County, at bridge on NJ Route 208 in Oakland, 0.2 mi (0.3 km) upstream from former site at Franklin Avenue (prior to October 1975), 0.6 mi (1.0 km) upstream from mouth, and 1.5 mi (2.4 km) northwest of Franklin Lakes. Datum of gage is 276.97 ft (84.420 m) National Geodetic Vertical Datum of 1929.	6.76 (17.51 km^2)	1968-71, 1976-79	5-25-79	2.78	410
01389030	Preakness (Signac) Brook near Preakness, NJ	Lat 40°56'55", long 74°13'25", Passaic County, at bridge on Ratzer Road, 1.0 mi (1.6 km) north of Preakness, and 2.0 mi (3.2 km) upstream from Naachtpunkt Brook.	3.24 (8.39 km^2)	1979	9-06-79	b5.07	†
01389534	Peckman River at Ozone Avenue at Verona, NJ	Lat 40°50'42", long 74°14'09", Passaic County, at bridge on Ozone Avenue in Verona, 4.0 mi (6.4 km) west of Clifton and 1.0 mi (1.6 km) southwest of Cedar Grove Reservoir.	4.45 (10.07 km^2)	1979	9-06-79	b5.09	†
01389765	Molly Ann Brook at North Haledon, NJ	Lat 40°57'11", long 74°11'07", Passaic County, at bridge on Overlook Avenue in North Haledon, 1.5 mi (2.4 km) west of Hawthorne and 0.5 mi (0.8 km) upstream from Oldham Pond Dam.	3.89 (11.52 km^2)	1979	9-06-79	8.66	†
01389900	Fleischer Brook at Market Street, Elmwood Park, NJ	Lat 40°53'57", long 74°06'54", Bergen County, at culvert on Market Street in Elmwood Park (formerly East Paterson), and 2.0 mi (3.2 km) upstream from mouth. Datum of gage is 35.31 ft (10.762 m) National Geodetic Vertical Datum of 1929.	1.37 (3.55 km^2)	1967-79	1-25-79	3.29	162
*01390450	Saddle River at Upper Saddle River, NJ	Lat 41°03'32", long 74°05'44", Bergen County, at culvert on Lake Street in Upper Saddle River, and 1.3 mi (2.1 km) downstream from Pine Brook. Datum of gage is 186.11 ft (56.726 m) National Geodetic Vertical Datum of 1929.	10.9 (28.2 km^2)	1966-79	1-25-79	b4.42	1,630
01390810	Hohokus Brook at Allendale, NJ	Lat 41°01'37", long 74°08'44", Bergen County, at bridge on Brookside Avenue in Allendale, and 0.2 mi (0.3 km) downstream from Valentine Brook. Datum of gage is 277.46 ft (84.570 m) National Geodetic Vertical Datum of 1929.	9.11 (23.60 km^2)	1969-79	1-25-79	5.75	487
01390900	Ramsey Brook at Allendale, NJ	Lat 41°01'45", long 74°08'06", Bergen County, at bridge on Brookside Avenue in Allendale and 0.6 mi (1.0 km) upstream from Hohokus Brook. Datum of gage is 270.79 ft (82.537 m) National Geodetic Vertical Datum of 1929.	2.55 (6.60 km^2)	1975-79	1-25-79	b2.94	282

ANNUAL MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS--Continued

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (ft^3/s)
		Passaic River basin--Continued					
01392500	Second River at Belleville, NJ	Lat 40°47'17", long 74°10'19", Essex County, on Mill Street in Branch Brook Park at Belleville, 300 ft (91 m) downstream from Franklin Avenue, and 1,100 ft (335 m) downstream from Hendricks Pond dam. Datum of gage is 62.6 ft (19.08 m) National Geodetic Vertical Datum of 1929.	11.6 (30.04 km^2)	1937-64‡, 1963-79	5-25-79	5.03	1,580
		Rahway River basin					
01393810	East Fork East Branch Rahway River at Orange, NJ	Lat 40°46'07", long 74°14'36", Essex County, at bridge on Mitchell Avenue on boundary between Orange and West Orange, and 300 ft (90 m) downstream of former gaging station (01393800) at Central Avenue. Datum of gage is 166 ft (50.6 m) National Geodetic Vertical Datum of 1929, at same datum as station 01393800.	0.83 (2.15 km^2)	1972-79	7-13-72 8-2-73 10-29-73 9-26-75 9-17-76 11-08-77	c4.49 c7.83 c6.61 d5.52 c3.56 c7.96	† † † † † †
		Note: Crest-stage data previously published in 1975 and 1976 annual water data reports for this station and for 01393800 are incorrect.					
		Raritan River basin					
01397500	Walnut Brook near Flemington, NJ	Lat 40°30'55", long 74°52'52", Hunterdon County, on right bank 1.2 mi (1.9 km) northwest of Flemington, and 2.3 mi (3.7 km) upstream from mouth. Datum of gage is 267.33 ft (81.482 m) National Geodetic Vertical Datum of 1929.	2.24 (5.80 km^2)	1936-61‡, 1965-79	1-25-79	3.71	900
01399550	Lamington River near Whitehouse, NJ	Lat 40°38'02", long 74°43'38", Hunterdon County, on right abutment of bridge on Halls Bridge Road, 1.2 mi (1.9 km) northeast of Whitehouse, and 1.2 mi (1.9 km) upstream from Rockaway Creek. Datum of gage is 98.09 ft (29.898 m) National Geodetic Vertical Datum of 1929.	57.3 (148.4 km^2)	1978-79	1-25-79	6.65	†
01399760	Lamington River at Lamington Road near North Branch, NJ	Lat 40°37'20", long 74°42'02", Somerset County, on right abutment of bridge on Lamington Road, 1.9 mi (3.0 km) northwest of North Branch, and 1.7 mi (2.7 km) upstream from mouth. Datum of gage is 81.04 ft (24.701 m) National Geodetic Vertical Datum of 1929.	97.6 (252.8 km^2)	1978-79	1-25-79	12.87	7,400
01400630	Millistone River at Southfield Road near Grovers Mill, NJ	Lat 40°18'12", long 74°34'33", Mercer County, at bridge on Southfield Road, 0.2 mi (0.3 km) southeast at Grovers Mill, 3.5 mi (5.6 km) southwest of Cranbury, and 3.0 mi (4.8 km) upstream of Bear Brook. Datum of gage is 62.63 ft (19.09 m) National Geodetic Vertical Datum of 1929.	41.0 (106.2 km^2)	1971,1975 1979	8-28-71 9-27-75 9-06-79	c8.6 c7.4 5.7	† † †

CREST-STAGE PARTIAL-RECORD STATIONS

ANNUAL MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS--Continued

Station No.	Station name	Location	Drainage area (mi²)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (ft³/s)
		Raritan River basin--Continued					
01400730	Millstone River at Plainsboro, NJ	Lat 40°19'27", long 74°36'51", Mercer County, on left bank 30 ft (9 m) upstream from bridge on Penn Central railroad, 100 ft (30 m) downstream from Cranbury Brook, 0.2 mi (0.3 km) upstream from Bear Brook, and 0.9 mi (1.4 km) southwest of Plainsboro. Datum of gage is 53.41 ft (16.279 m) National Geodetic Vertical Datum of 1929.	65.8 (170.4 km²)	1965-75‡, 1976-79	d1-27-76 1-25-79	-- 7.14	† 2,530
01400775	Bear Brook at Route 535 near Locust Corner, NJ	Lat 40°16'04", long 74°34'39", Mercer County, at bridge on State Route 535, 0.9 mi (1.4 km) southwest of Locust Corner, 2.0 mi (3.2 km) east of Hightstown, and 4.2 mi (6.8 km) above mouth. Datum of gage is 73.75 ft (22.479 m) National Geodetic Vertical Datum of 1929.	6.69 (16.78 km²)	1971,1975 1979	8-28-71 9-27-75 9-06-79	bc7.3 c8.9 b5.43	† † †
01400822	Little Bear Brook at Penns Neck, NJ	Lat 40°19'21", long 74°37'37", Mercer County, at downstream side of bridge on Alexander Road, 0.9 mi (1.4 km) southeast of Penns Neck, 2.8 mi (4.5 km) southwest of Plainsboro and 1.0 mi (1.6 km) above mouth. Datum of gage is 53.96 ft (16.447 m) National Geodetic Vertical Datum of 1929.	1.84 (4.76 km²)	1971,1975 1979	8-28-71 9-27-75 9-06-79	b6.4 6.7 b3.32	† † †
*01400850	Woodsville Brook at Woodsville, NJ	Lat 40°22'37", long 74°49'33", Mercer County, at bridge on secondary road, 0.3 mi (0.5 km) southeast of Woodsville, and 0.8 mi (1.3 km) upstream from mouth. Datum of gage is 226.7 ft (69.10 m) National Geodetic Vertical Datum of 1929.	1.78 (4.61 km²)	1957-58, 1964-79	9-06-79	4.90	840
01400900	Stony Brook at Glenmoore, NJ	Lat 40°21'55", long 74°47'14", Mercer County, at highway bridge on Spur State Route 518, 200 ft (61 m) east of tracks of CONRAIL, at Glenmoore, and 2.0 mi (3.2 km) southwest of Hopewell. Datum of gage is 159.1 ft (48.49 m) National Geodetic Vertical Datum of 1929.	17.0 (44.03 km²)	1957-79	9-06-79	b8.23	3,350
*01400930	Baldwin Creek at Pennington, NJ	Lat 40°20'18", long 74°47'50", Mercer County, at bridge on State Route 31, 0.8 mi (1.3 km) north of Pennington, and 0.9 mi (1.4 km) upstream from Baldwin Lake dam. Datum of gage is 161.69 ft (49.283 m) National Geodetic Vertical Datum of 1929.	1.99 (5.15 km²)	1960-79	2-26-79	6.37	490
01400950	Hart Brook near Pennington, NJ	Lat 40°19'17", long 74°45'38", Mercer County, at culvert on Federal City Road, 1.6 mi (2.6 km) upstream of mouth, and 1.7 mi (2.7 km) southeast of Pennington. Datum of gage after July 1, 1975 is 163.32 ft (49.780 m) National Geodetic Vertical Datum of 1929.	0.57 (1.48 km²)	1968-79	2-26-79	3.52	136
01401200	Duck Pond Run at Clarksville, NJ	Lat 40°18'24", long 74°40'06", Mercer County, at bridge on U.S. Route 1, 0.5 mi (0.8 km) upstream from Delaware and Raritan Canal, and 0.9 mi (1.4 km) northeast of Clarksville. Datum of gage is 54.14 ft (16.502 m) National Geodetic Vertical Datum of 1929.	5.21 (13.50 km²)	1965-79	2-26-79	4.92	280

CREST-STAGE PARTIAL-RECORD STATIONS

ANNUAL MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS--Continued

Station No.	Station name	Location	Drainage area (mi²)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (ft³/s)
		Raritan River basin--Continued					
01401301	Millstone River at Carnegie Lake at Princeton, NJ	Lat 40°22'11", long 74°37'15", Middlesex County, at right end of Carnegie Lake dam, 2.5 mi (4.0 km) northeast of Princeton. Datum of gage is 50.00 ft (15.240 m) National Geodetic Vertical Datum of 1929.	159 (412 km²)	1926-74‡, 1977-79	1-21-79	5.33	7,820
*01401520	Beden Brook near Hopewell, NJ	Lat 40°23'02", long 74°44'28", Mercer County, at bridge on Aunt Molly Road, 0.8 mi (1.3 km) upstream from Province Line Road, 1.1 mi (1.8 km) southeast of Hopewell, and 2.6 mi (4.2 km) southwest of Blawenburg. Datum of gage is 116.43 ft (35.488 m) National Geodetic Vertical Datum of 1929.	6.07 (15.72 km²)	1967-79	1-25-79	6.04	1,250
01401595	Rock Brook near Blawenburg, NJ	Lat 40°25'47", long 74°41'05", Somerset County, at bridge on Burnt Hill Road, 0.7 mi (1.1 km) upstream from mouth, 1.0 mi (1.6 km) northeast of Blawenburg, and 2.8 mi (4.5 km) northwest of Rocky Hill. Datum of gage is 63.45 ft (19.340 m) National Geodetic Vertical Datum of 1929.	9.03 (23.39 km²)	1967-79	1-21-79	b6.00	1,150
01401600	Beden Brook near Rocky Hill, NJ	Lat 40°24'52", long 74°39'02", Somerset County, at bridge on U.S. Route 206, 0.7 mi (1.1 km) upstream from Pike Run, 1.2 mi (1.9 km) northwest of Rocky Hill, and 4.6 mi (7.4 km) north of Princeton. Datum of gage is 38.09 ft (11.610 m) National Geodetic Vertical Datum of 1929.	27.6 (71.5 km²)	1967-79	d11-29-71 1-25-79	b8.88 b10.97	2,500 4,300
01401870	Six Mile Run near Middlebush, NJ	Lat 40°28'12", long 74°32'42", Somerset County, at bridge on South Middlebush Road, 1.6 mi (2.6 km) upstream from mouth, and 2.1 mi (3.4 km) south of Middlebush. Datum of gage is 39.91 ft (12.165 m) National Geodetic Vertical Datum of 1929.	10.7 (27.7 km²)	1966-79	1-25-79	8.37	1,900
01403400	Green Brook at Seeley Mills, NJ	Lat 40°39'53", long 74°23'10", Union County, at ruins of Seeley Mills, 0.1 mi (0.2 km) downstream of Blue Brook, 0.5 mi (0.8 km) northwest of intersection of Westfield Road, and U.S. Route 22 in Scotch Plains, and 2.5 mi (4.0 km) southeast of Berkeley Heights.	6.28 (16.27 km²)	1969-79	9-06-79	10.76	2,390
01403570	Stony Brook at North Plainfield, NJ	Lat 40°37'19", long 74°26'11", Somerset County, at bridge on Green Brook Road, in North Plainfield, 100 ft (30 m) downstream of Crab Brook, and 1.4 mi (2.3 km) upstream of mouth. Datum of gage is 71.59 ft (21.821 m) National Geodetic Vertical Datum of 1929.	6.88 (17.82 km²)	1975-79	9-06-79	b5.57	1,100
01403600	Green Brook at Rock Avenue, Plainfield, NJ	Lat 40°36'07", long 74°27'28", Somerset County, at bridge on Rock Avenue in Plainfield, 0.35 mi (0.56 km) north of West Front Street, and 0.65 mi (1.8 km) south of Route 22. Datum of gage is National Geodetic Vertical Datum of 1929.	18.2 (47.1 km²)	1972-79	9-06-79	54.15	2,150

CREST-STAGE PARTIAL-RECORD STATIONS

ANNUAL MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS--Continued

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (ft^3/s)
		Manasquan River basin					
*01407830	Manasquan River near Georgia, NJ	Lat 40°12'36", long 74°16'41", Monmouth County, at culvert on Jacksons Mill Road near Georgia, and 0.5 mi (0.8 km) upstream from Debois Creek. Datum of gage is 70.47 ft (21.479 m) National Geodetic Vertical Datum of 1929.	10.6 (27.5 km^2)	1969-79	1-21-79	12.61	324
*01408015	Mingamahone Brook at Farmingdale, NJ	Lat 40°11'38", long 74°09'42", Monmouth County, at bridge on Belmar Road in Farmingdale, and 3.0 mi (4.8 km) upstream from mouth. Datum of gage is 48.64 ft (14.825 m) National Geodetic Vertical Datum of 1929.	6.22 (16.11 km^2)	1969-79	1-21-79	6.05	265
*01408030	Manasquan River at Allenwood, NJ	Lat 40°08'35", long 74°07'03", Monmouth County, at bridge on Hospital Road at Allenwood, and 1.5 mi (2.4 km) downstream from Mill Run.	63.9 (165.5 km^2)	1969-79	1-21-79	b10.35	3,100
		Mullica River basin					
**01409000	Cedar Creek at Lanoka Harbor, NJ	Lat 39°52'03", long 74°10'10", Ocean County, at bridge on State Route 9 in Lanoka Harbor, 0.6 mi (1.0 km) south of Toms River, and 2.0 mi (3.2 km) upstream from mouth. Datum of gage is National Geodetic Vertical Datum of 1929.	56.0 (145.0 km^2)	1932-58‡, 70-71‡, 79	2-26-79	f4.24	†
*01409375	Mullica River near Atco, NJ	Lat 39°47'08", long 74°51'38", Burlington County, on left bank of small lake 50 ft (15 m) downstream from bridge on Jackson-Medford Road, 0.7 mi (1.1 km) north of intersection of Route 534 with Jackson-Medford Road, and 1.6 mi (2.6 km) east of Atco. Datum of gage is 102.90 ft (31.364 m) National Geodetic Vertical Datum of 1929.	3.22 (8.34 km^2)	1975-79	2-26-79	b4.60	42
*01409403	Wildcat Branch at Chesilhurst, NJ	Lat 39°44'04", long 74°51'33", Camden County, at culvert on Old White Horse Pike, 0.5 mi (0.8 km) east of Chesilhurst, and 0.9 mi (1.4 km) north of Waterford Works. Datum of gage is 98.98 ft (30.170 m) National Geodetic Vertical Datum of 1929.	1.03 (2.67 km^2)	1975-79	2-26-79	5.71	20
*01409409	Blue Anchor Brook near Blue Anchor, NJ	Lat 39°41'17", long 74°51'00", Camden County, at bridge on Spring Garden Road, 4,000 ft (1,220 m) upstream of Route 30 highway bridge, 1.8 mi (2.9 km) east of Blue Anchor and 2.2 mi (3.5 km) upstream from mouth. Datum of gage is 84.94 ft (25.890 m) National Geodetic Vertical Datum of 1929.	3.01 (7.80 km^2)	1975-79	2-26-79	4.69	22

* Also a low-flow partial-record station.
** Also a tidal crest-stage station
† Discharge not determined.
‡ Operated as a continuous-record gaging station.
a Estimated.
b Downstream side of bridge.
c Not previously published.
d Revised.
e Backwater from tide
f Estimated carrying capacity of stream, flow exceeding 85 ft^3/s (2.41 m^3/s) goes into storage or by passes gage.

DISCHARGE MEASUREMENT AT MISCELLANEOUS SITES

Measurements of streamflow at points other than gaging stations are given in the following table. Those that are measurements of base flow are designated by an asterisk (*); measurements of peak flow by a dagger (†).

DISCHARGE MEASUREMENTS MADE AT MISCELLANEOUS SITES DURING WATER YEAR 1979

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements Date	Measurements Discharge (ft^3/s)
		Hudson River basin				
01367770 Wallkill River	Rondout Creek	Lat 41°11'38", long 74°34'32", Sussex County, at bridge 0.6 mi (1.0 km) upstream of Papakating Creek, 1.7 mi (2.7 km) southwest of Independence Corner, 2.0 mi (3.2 km) southeast of Sussex, and 2.1 mi (3.4 km) northwest of McAfee.	60.8 (157.5 km^2)	1977-78	12-12-78 8-30-79	92 37
01367910 Papakating Creek	Wallkill River	Lat 41°12'02", long 74°35'59" Sussex County, at bridge on State Highway 23, 0.6 mi (1.0 km) south of Sussex, 2.0 mi (3.2 km) upstream from mouth, 2.6 mi (4.2 km) southwest of Independence Corner, and 3.4 mi (5.6 km) northwest of McAfee.	59.4 (153.8 km^2)	1977-78	12-12-78	54
		Raritan River basin				
01396535 South Branch Raritan River	Raritan River	Lat 40°39'49", long 74°53'52", Hunterdon County, at bridge on Arch Street in High Bridge, 0.9 mi (1.4 km) northeast of Mariannes Corner, and 4.3 mi (6.9 km) northeast of Norton.	68.8 (178.2 km^2)	1978	1-22-79 1-26-79	546 728
01396588 Spruce Run	South Branch Raritan River	Lat 40°40'41", long 74°55'06", Hunterdon County, at site 800 ft (244 m) downstream of Rocky Run, 0.3 mi (0.5 km) above Van Syckel Road bridge, 1.5 mi (2.4 km) northwest of High Bridge and 1.6 mi (2.6 km) southeast of Glen Gardner.	15.5 (40.1 km^2)	-	8-13-79	27
01397380 Bushkill Brook	South Branch Raritan River	Lat 40°31'15", long 74°49'40", Hunterdon County, at bridge on River Road in Rockefellows Mills, 200 ft (60 m) upstream from mouth and 1.5 mi (2.4 km) west of Three Bridges.	4.31 (11.16 km^2)	1978	5-01-79	*6.6
01397400 South Branch Raritan River	Raritan River	Lat 40°31'01", long 74°48'10", Hunterdon County, at bridge on Main Street in Three Bridges, 1.4 mi (2.3 km) downstream from Bushkill Brook, and 3.0 mi (4.8 km) northeast of Flemington.	181 (469 km^2)	1969, 1975-76, 1978	1-08-79 1-26-79 4-30-79	4070 1670 *294
01398102 South Branch Raritan River	Raritan River	Lat 40°32'48", long 74°41'48", Somerset County, at bridge on South Branch Road in South Branch, and 2.0 mi (3.2 km) north of Flagtown.	265 (686 km^2)	1975-77	1-26-79	2,240
01399545 Lamington River	North Branch Raritan River	Lat 40°39'38", long 74°43'40", Somerset County, 0.4 mi (0.6 km) downstream from Cold Brook, 0.6 mi (1.0 km) west of Lamington, and 3.8 mi (6.1 km) south of Potterstown.	53.6 (138.8 km^2)	1978	1-25-79 1-26-79 4-06-79	983 825 105
01400120 Raritan River	Raritan Bay	Lat 40°33'52", long 74°38'10", Somerset County, at bridge on South Branch-Raritan road in Raritan, 3.5 mi (5.6 km) northeast of South Branch, and 3.6 mi (5.8 km) southeast of North Branch.	474 (1228 km^2)	1975-78	1-26-79 8-10-79	4830 *243
01400555 Millstone tributary No. 2	Millstone River	Lat 40°16'00", long 74°28'00", Somerset County, at bridge on State Route 33, 300 ft (9.0 m) upstream from mouth, 0.3 mi (0.5 km) east of Applegarth-Prospect Plains Road, and 0.8 mi (1.3 km) south of Applegarth.	4.71 (12.20 km^2)	-	12-06-78	5.13

DISCHARGE MEASUREMENTS AT MISCELLANEOUS SITES

DISCHARGE MEASUREMENTS MADE AT MISCELLANEOUS SITES DURING WATER YEAR 1979--Continued

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements	
					Date	Discharge (ft^3/s)
		Raritan River basin--Continued				
01402540 Millstone River	Raritan River	Lat 40°31'47", long 74°39'19", Somerset County, at bridge on Wilhouski Street in Weston, 0.8 mi (1.3 km) southwest of Alma White College, and 1.9 mi (3.1 km) north of Millstone.	271 (702 km^2)	-	9-06-79	1800
01404302 Lawrence Brook	Raritan River	Lat 40°24'58", long 74°29'38", Middlesex County, at bridge on Davidsons Mill Road, at inflow to Farrington Lake, 1.5 mi (2.4 km) west of Paulas Corners, and 2.3 mi (3.7 km) south of Adams.	12.4 (20.0 km^2)	-	8-14-79	17
01405340 Manalapan Brook	South River	Lat 40°17'46", long 74°23'53", Middlesex County, at bridge on Federal Road, 4.1 mi (6.6 km) northeast of Applegarth, and 3.1 mi (5.0 km) southwest of Matchaponix.	20.9 (54.1 km^2)	-	3-25-79 5-25-79@1205 5-25-79@1305	70 217 201
		Navesink River basin				
01407253 Willow Brook	Hop Brook	Lat 40°19'47", long 74°10'26", Monmouth County, at bridge on Willow Brook Road, 1.2 mi (1.9 km) southeast of Holmdel, 1.3 mi (2.1 km) northeast of Vanderburg, and 1.6 mi (2.6 km) northwest of Sugar Loaf Hill.	7.56 (19.48 km^2)	-	5-09-79 5-24-79 7-12-79	*9.7 26 *7.5
		Manasquan River basin				
01407997 Marsh Bog Brook	Manasquan River	Lat 40°10'01", long 74°09'33", Monmouth County, at bridge on Squankum-Yellow Brook Road at Squankum, 0.2 mi (0.3 km) upstream from mouth.	4.91 (12.72 km^2)	1966, 1972,74, 1978	11-29-78 1-22-79 5-10-79 7-13-79	*7.0 66 *3.9 *1.6
		Metedeconk River basin				
01408070 North Branch Metedeconk River	Metedeconk River	Lat 40°10'52", long 74°17'17", Monmouth County, at bridge on Georgia-Jackson Mills road and 2.0 mi (3.2 km) southwest of Wyckoff Mills.	5.52 (14.30 km^2)	1966, 1978	11-29-78 1-22-79 7-13-79 5-10-79	*11 79 *2.1 *4.8
		Mullica River basin				
01409416 Hammonton Creek	Mullica River	Lat 39°38'02", long 74°43'05", Atlantic County, at bridge on Chestnut Road, 0.4 mi (0.6 km) south of Wescoatville, 1.1 mi (1.8 km) southwest of Wesco, 1.6 mi (2.6 km) upstream from Norton Branch and 3.8 mi (6.1 km) southwest of Batsto.	9.60 (24.86 km^2)	1974,78	11-02-78 11-22-78 1-22-79 1-23-79 7-12-79	*9.8 *9.7 90 44 *10
		Great Egg Harbor River basin				
01411110 Great Egg Harbor River	Great Egg Harbor Bay	Lat 39°30'50", long 74°46'47", Atlantic County, at bridge on U.S. Route 322 in Weymouth, 0.5 mi (0.8 km) upstream from Deep Run, and 20.9 mi (33.6 km) upstream from mouth.	154 (399 km^2)	1978	11-02-78 11-02-78 1-22-79 7-26-79	*119 *116 802 *241

* Base flow.

MULLICA RIVER BASIN

MULLICA RIVER BASIN LOW-FLOW INVESTIGATION - ATSION TO BATSTO, NJ

A series of low-flow discharge measurments were made in the Mullica River Basin to investigate the effect of man-made diversions and inter-connecting swamps on the drainage network of the Mullica River and its tributaries near Atsion, New Jersey. The data collected in this series of measurements, along with that already collected will provide the basis for determining the base-flow yields of this part of the basin.

Weather records at Atlantic City to the southeast and Indian Mills to the north of the area, show that no precipitation occurred for the four days prior to August 17 and for the four days prior to September 11. Therfore, the measurements are considered to represent base flow.

The measurements on each stream are listed in downstream order, and each tributary is inserted in the order in which it enters the main stem. Drainage areas shown were determined from recent U.S. Geological Survey topographic maps (scale = 1:24,000). Previous base-flow measurements were made in years shown in the table.

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements	
					Date	Discharge (ft^3/s)
394149744135 Mullica River tributary	Mullica River	Lat 39°41'49", long 74°41'35", Atlantic County, at bridge on secondary road, 3.2 mi (5.2 km) north of Constable Bridge, 3.5 mi (5.6 km) southeast of Atsion, 4.2 mi (6.8 km) north of Batsto, and 0.8 mi (1.3 km) above mouth.	-	-	8-17-79	3.8
*01409395 Mullica River tributary	Mullica River	Lat 39°44'29", long 74°40'53", Atlantic County, 0.2 mi (0.3 km) upstream from mouth, 3.8 mi (6.1 km) northwest of Batsto, and 4.2 mi (6.8 km) southeast of Atsion.	33.1 (85.7 km^2)	1975-78	8-17-79 9-11-79	23 26
394532745302 Hays Mill Creek	Sleeper Branch	Lat 39°45'32", long 74°53'02", Camden County, at abandoned bridge (Old State Route 30) at outlet of Atco Lake, in Atco, and 3.3 mi (5.3 km) southeast of Berlin.	-	-	8-17-79	3.7
*01409402 Hays Mill Creek	Sleeper Branch	Lat 39°45'02", long 74°50'28", Camden County, at bridge on Tremont Avenue, 0.5 mi (0.8 km) upstream from Cooper Branch, 2.0 mi (3.2 km) northeast of Chesilhurst, and 2.8 mi (4.5 km) southeast of Atco.	7.13 (18.47 km^2)	1974-78	8-17-79 9-11-79	10 8.6
394445745024 Cooper Branch	Sleeper Branch	Lat 39°44'45", long 74°50'24", Camden County, at bridge on Burnt Mill Road, 700 ft (210 m) upstream from mouth, 1.6 mi (2.6 km) northeast of Waterford Works, and 2.8 mi (4.5 km) southeast of Atco.	1.93 (5.00 km^2)	-	8-17-79	1.2
394420744958 Wildcat Branch	Sleeper Branch	Lat 39°44'20", long 74°49'58", Camden County, at bridge on Burnt Mill Road, 0.1 mi (0.2 km) downstream from outlet of Beaverdam Lake, 1.4 mi (2.3 km) northeast of Waterford Works, and 3.4 mi (5.5 km) southeast of Atco.	2.25 (5.83 km^2)	-	8-17-79	2.8
394412744537 Sleeper Branch Diversion (Salter Ditch)	Sleeper Branch	Lat 39°44'12", long 74°45'37", Camden County, at abandoned bridge site, 900 ft (275 m) southeast of Burnt House Road, 0.9 mi (1.4 km) north of Parkdale, and 1.8 mi (2.9 km) west of Atsion.	-	-	8-17-79	5.6
394322744525 Sleeper Branch	Mullica River	Lat 39°43'22", long 74°45'25", Camden County, at bridge on Fleming Pike at Parkdale, 1.0 mi (1.6 km) west of Dutchtown, and 2.1 mi (3.4 km) southwest of Atsion.	17.8 (46.1 km^2)	-	8-17-79	19
*01409404 Sleeper Branch	Mullica River	Lat 39°42'46", long 74°44'36", Atlantic County, at bridge on U.S. Route 206, 0.1 mi (0.2 km) upstream from Clark Branch, 0.6 mi (1.0 km) south of Dutchtown, and 2.1 mi (3.4 km) south of Atsion.	18.2 (47.1 km^2)	1975-78	8-17-79 9-12-79	5.1 3.1
394248744642 Clark Branch	Sleeper Branch	Lat 39°42'48", long 74°46'42", Camden County, at bridge on Burnt Mill Road, 0.1 mi (0.2 km) upstream from Price Branch, 3.4 mi (5.5 km) southwest of Atsion, and 5.5 mi (8.8 km) northeast of Hammonton.	3.34 (8.65 km^2)	-	8-17-79	1.4

MULLICA RIVER BASIN LOW-FLOW INVESTIGATION - ATSION TO BATSTO, NJ--Continued

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements	
					Date	Discharge (ft^3/s)
394251744636 Clark Branch	Sleeper Branch	Lat 39°42'05 ", long 74°46'36", Camden County, at bridge on Burnt House Road, just downstream from Price Branch, 3.3 mi (5.3 km) southwest of Atsion, and 5.5 mi (8.8 km) northeast of Hammonton.	6.24 ($16.16\ km^2$)	-	8-17-79	3.3
*01409405 Clark Branch	Sleeper Branch	Lat 39°42'42", long 74°44'39", Atlantic County, at bridge on U.S. Route 206, 0.1 mi (0.2 km) upstream from Sleeper Branch, 0.7 mi (1.1 km) south of Dutchtown, and 2.2 mi (3.5 km) south of Atsion.	7.12 ($18.44\ km^2$)	1975-78	8-17-79 9-12-79	23 19
394154744513 Gun Branch	Sleeper Branch	Lat 39°41'54", long 74°45'13", Atlantic County, at bridge on U.S. Route 206, 1.7 mi (2.7 km) southwest of Dutchtown, 3.3 mi (5.3 km) southwest of Atsion, and 4.0 mi (6.4 km) northeast of State Route 30 in Hammonton.	-	-	8-17-79	.13
*01409406 Sleeper Branch	Mullica River	Lat 39°38'48", long 74°39'39", Atlantic County, at footbridge 600 ft (180 m) upstream from Mullica River, and 0.6 mi (1.0 km) northwest of Batsto.	36.1 ($93.5\ km^2$)	1975-78	8-17-79 9-13-79	8.7 7.5

* Also a low-flow partial record site.

The following table contains annual maximum stages for tidal crest-stage stations. The information is obtained from a crest-stage gage or a water-stage recorder located at each site. A crest-stage gage is a device which will register the peak stage occurring between inspections of the gage. All stages are elevations above National Geodetic Vertical Datum of 1929 unless otherwise noted. Only the maximum stage is given. Information on some other high stages may have been obtained but is not published herein. The years given in the period of record represent water years for which the annual maximum has been determined.

ANNUAL MAXIMUM STAGES AT TIDAL CREST-STAGE PARTIAL-RECORD STATIONS

Station No.	Station name	Location	Period of record	Annual maximum	
				Date	Elevation NGVD* (feet)
01408160	Metedeconk River near Laurelton, NJ	Lat 40°03'20", long 74°06'37", Ocean County, on pier at Laurelton Yacht Basin at Princeton Avenue. 1.4 mi (2.3 km) southeast of Laurelton, and 2.4 mi (3.9 km) upstream from mouth.	1969-79	9-06-79	4.36
01408168	Barnegat Bay at Mantoloking, NJ	Lat 40°42'24", long 74°03'25", Ocean County, at east end of Herbert Street (Manaloking Road) bridge in Manaloking and 2.0 mi (3.2 km) south of Bay Head.	1979	9-06-79	4.69
01408200	Barnegat Bay at Bay Shore, NJ	Lat 39°56'56", long 74°06'52", Ocean County, at west end of State Route 37 bridge over Barnegat Bay at Bay Shore, 2.2 mi (3.5 km) west of Seaside Heights, and 4.5 mi (7.2 km) east of Toms River.	1965-79	9-06-79	3.79
01409000	Cedar Creek at Lanoka Harbor, NJ	Lat 39°52'03", long 74°10'10", Ocean County, at bridge on U.S. Route 9 in Lanoka Harbor, 0.6 mi (1.0 km) south of Toms River, and 2.0 mi (3.2 km) upstream from mouth. Datum of gage is National Geodetic Vertical Datum of 1929.	1932-58, 1970-71, 1979	2-26-79	4.20
01409125	Barnegat Bay at Barnegat Light, NJ	Lat 39°45'37", long 74°06'39", Ocean County, at north side of pier of U.S. Coast Guard boat basin on 7th Street (extended) in Barnegat Light Borough, 0.35 mi (0.56 km) southwest of Barnegat Lighthouse and 9.1 mi (14.6 km) northeast of Ship Bottom.	1965-79	2-26-79	5.06
01409145	Manahawkin Bay near Manahawkin, NJ	Lat 39°40'13", long 74°12'54", Ocean County, at west end of State Route 72 bridge over Manahawkin Bay, 2.5 mi (4.0 km) northwest of Ship Bottom, and 3.1 mi (5.0 km) southeast of Manahawkin.	1965-79	2-26-79	4.12
01409285	Little Egg Harbor at Beach Haven, NJ	Lat 39°33'10", long 74°15'07", Ocean County, in Beach Haven at U.S. Coast Guard station, 6.0 mi (9.7 km) southeast of Tuckerton and 7.4 mi (11.9 km) southeast of Ship Bottom.	1979	2-26-79	4.73
01409290	Tuckerton Cove near Tuckerton, NJ	Lat 39°34'35", long 74°19'50", Ocean County, on bulkhead piling of Tuckerton Cove at the southern end of State Route 539, 0.4 mi (0.6 km) east of mouth of Tuckerton Creek, and 1.9 mi (3.1 km) south of Tuckerton.	1965-73, 1974-79	9-06-79	3.51
01409510	Batsto River at Pleasant Mills, NJ	Lat 39°37'55", long 74°38'40", Ocean County, on right bank, 0.5 mi (0.8 km) upstream from mouth, and 1.0 mi (1.6 km) southeast of Pleasant Mills.	1958-79	1-24-79	4.64
01410100	Mullica River near Port Republic, NJ	Lat 39°33'12", long 74°27'46", Atlantic County, on right bank on bulkhead piling at south end of U.S. Route 9 and Garden State Parkway bridge over Mullica River, 2.8 mi (4.5 km) northeast of Port Republic, and 2.8 mi (4.5 km) south of New Gretna.	1965-79	2-26-79	4.91

ANNUAL MAXIMUM STAGES AT TIDAL CREST-STAGE PARTIAL-RECORD STATIONS--Continued

Station No.	Station name	Location	Period of record	Annual maximum	
				Date	Elevation NGVD* (feet)
01410500	Absecon Creek at Absecon, NJ	Lat 39°25'45", long 74°31'16", Atlantic County, on right bank 30 ft (9.1 m) downstream from Doughty Pond Dam of Atlantic City Water Department, 1 mi (1.6 km) west of Absecon, and 3.4 mi (5.5 km) upstream from mouth.	1923-29‡, 1933-38‡, 1946-79‡	2-26-79	5.67
01410570	Beach Thorofare at Atlantic City, NJ	Lat 39°21'56", long 74°26'44", Atlantic County, on south end of center support cribbing of Pennsylvania-Reading Seashore Line railroad swivel bridge, in Atlantic City, 0.5 mi (0.8 km) northeast of Bader Field Airport and 2.7 mi (4.3 km) northeast of Ventnor City.	1978‡, 1979	2-26-79	5.74
01411300	Tuckahoe River at Head of River, NJ	Lat 39°18'25", long 74°49'15", Cape May County, on right bank at highway bridge on State Route 49, 0.2 mi (0.3 km) upstream from McNeals Branch, 0.4 mi (0.6 km) southeast of Head of River, and 3.7 mi (6.0 km) west of Tuckahoe.	1978‡, 1979‡	2-26-79	Unknown
01411315	Great Egg Harbor Bay at Beesleys Point, NJ	Lat 39°17'18", long 74°37'50", Cape May County, at Atlantic City Electric Company's B. L. England Generating Station intake, 0.1 mi (0.2 km) west of south end of Route 9 bridge over Great Egg Harbor Bay, 0.7 mi (1.1 km) north of Beesleys Point, and 3.0 mi (4.8 km) west of Ocean City.	1963-78‡, 1979	2-26-79	b5.55
01411318	Crook Horn Creek at Ocean City, NJ	Lat 39°15'09", long 74°37'44", Cape May County, at dock on property of county maintenance yard, 100 ft (30 km) south of Roosevelt Boulevard, 1.3 mi (2.1 km) southeast of Marmora, and 3.3 mi (5.3 km) southwest of city hall in Ocean City.	1979	2-26-79	4.62
01411320	Great Egg Harbor Bay at Ocean City, NJ	Lat 39°17'03", long 74°34'41", Cape May County, on bulkhead at west end of 7th Street (gage relocated from 5th Street in October 1974), Ocean City, and 2.5 mi (4.0 km) southeast of Somers Point.	1965-79	2-26-79	6.10
01411350	Ludlam Thorofare at Sea Isle City, NJ	Lat 39°09'24", long 74°42'00", Cape May County, on bulkhead at west end of 44th Street in Sea Isle City.	1978‡, 1979	2-26-79	5.79
01411355	Ingram Thorofare at Avalon, NJ	Lat 39°06'37", long 74°44'04", Cape May County, on bulkhead 200 ft (60 m) southwest of east end of Old Avalon Road, 1.0 mi (1.6 km) west of Avalon and 1.0 mi (1.6 km) south of Townsends Inlet.	1978‡, 1979	2-26-79	5.85
01411360	Great Channel at Stone Harbor, NJ	Lat 39°03'26", long 74°45'53", Cape May County, on bulkhead piling at east end of bridge at west end of town of Stone Harbor, 3.7 mi (6.0 km) southeast of Cape May Court House, and 3.9 mi (6.3 km) southwest of Avalon.	1965-79	2-26-79	5.80
01411380	Grassy Sound at West Wildwood, NJ	Lat 39°00'25", long 74°49'47", Cape May County, on bridge piling near northeast end of Glenwood Avenue at northern tip of West Wildwood, 1.2 mi (1.9 km) northwest of Wildwood, and 2.9 mi (4.7 km) east of Rio Grande.	1965-79	a12-02-74 2-26-79	6.67 5.87

ANNUAL MAXIMUM STAGES AT TIDAL CREST-STAGE PARTIAL-RECORD STATIONS--Continued

Station No.	Station name	Location	Period of record	Annual maximum	
				Date	Elevation NGVD* (feet)
01411390	Cape May Harbor at Cape May, NJ	Lat 38°56'54", long 74°53'26", Cape May County, on grounds of U.S. Coast Guard Receiving Center in Cape May, and 0.7 mi (1.1 km) southeast of east end of Cape May Canal.	1965-79	2-26-79	5.92

* National Geodetic Vertical Datum of 1929 (NGVD).
† Not determined.
‡ Operated as a continuous record gaging station.
a Revised.
b Furnished in cooperation with Atlantic City Electric Co.
c Gage datum; not National Geodetic Vertical Datum of 1929 datum.
e Adjusted to National Geodetic Vertical Datum of 1929.

SUSPENDED SEDIMENT DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
01367620 - WALLKILL R AT OUTFLOW OF LK MOHAWK AT SPARTA NJ (LAT 41 01 59 LONG 074 37 36)				
FEB , 1979 21...	1110	--	5	--
APR 18...	1045	--	8	--
MAY 17...	1015	--	18	--
01367700 - WALLKILL R AT FRANKLIN NJ (LAT 41 06 43 LONG 074 35 21)				
FEB , 1979 21...	1230	--	4	--
APR 18...	1150	--	4	--
MAY 17...	1200	--	27	--
01367770 - WALLKILL R NR SUSSEX NJ (LAT 41 11 38 LONG 074 34 32)				
JAN , 1979 31...	1315	234	4	2.5
APR 18...	1300	185	5	2.5
MAY 17...	1300	59	30	4.8
AUG 27...	1345	33	25	2.2
01367910 - PAPAKATING C AT SUSSEX NJ (LAT 41 12 02 LONG 074 35 59)				
JAN , 1979 31...	1200	192	10	5.2
APR 25...	1030	88	14	3.3
MAY 31...	0700	254	32	22
AUG 27...	1240	42	22	2.5
01368950 - BLACK C NR VERNON NJ (LAT 41 13 21 LONG 074 28 33)				
APR , 1979 25...	1140	30	11	.89
MAY 23...	1020	23	22	1.4
01377000 - HACKENSACK R AT RIVERVALE NJ (LAT 40 59 55 LONG 073 59 27)				
OCT , 1978 24...	1150	40	12	1.3
NOV 28...	0845	66	45	8.0
JAN , 1979 16...	1115	46	27	3.4
FEB 21...	1050	46	6	.75
MAR 22...	1020	64	6	1.0
JUN 04...	1235	171	15	6.9
JUL 24...	1005	129	241	84
AUG 07...	1005	135	24	8.7
SEP 26...	0950	46	30	3.7

ANALYSES OF SAMPLES COLLECTED AT SEDIMENT PARTIAL-RECORD STATIONS--Continued

SUSPENDED SEDIMENT DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

01377500 - PASCACK BK AT WESTWOOD NJ (LAT 40 59 33 LONG 074 01 19)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
OCT , 1978				
24...	0940	31	13	1.1
NOV				
28...	1015	34	52	4.8
JAN , 1979				
16...	0915	31	31	2.6
AUG				
09...	1045	16	15	.65

01378690 - PASSAIC R NR BERNARDSVILLE NJ (LAT 40 44 03 LONG 074 32 26)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
JUL , 1979				
12...	1250	--	9	--

01379000 - PASSAIC R NR MILLINGTON NJ (LAT 40 40 48 LONG 074 31 45)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
OCT , 1978				
12...	1300	15	13	.53
NOV				
07...	1430	14	8	.30
JAN , 1979				
24...	0955	601	6	9.7
MAR				
21...	1040	74	4	.80
MAY				
17...	1040	44	22	2.6
JUL				
03...	1015	28	1	.08
18...	0910	31	17	1.4
AUG				
09...	1025	17	20	.92
SEP				
12...	1000	117	9	2.8
20...	1245	23	15	.93

01379500 - PASSAIC R NR CHATHAM NJ (LAT 40 43 31 LONG 074 23 23)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
OCT , 1978				
24...	1040	28	14	1.1
JAN , 1979				
24...	1235	1060	56	160
MAR				
21...	1215	135	19	6.9
MAY				
31...	1155	571	22	34
JUL				
03...	1200	50	17	2.3
18...	1110	73	24	4.7
AUG				
09...	1215	30	20	1.6
SEP				
27...	1415	204	37	20

01379530 - CANOE BK NR SUMMIT NJ (LAT 40 44 40 LONG 074 21 20)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
OCT , 1978				
24...	1245	.73	21	.04
JUL , 1979				
18...	1400	14	90	3.4
SEP				
27...	1540	2.0	10	.05

SUSPENDED SEDIMENT DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)
01380500 - ROCKAWAY R AB RE AT BOONTON NJ (LAT 40 54 06 LONG 074 24 40)				
NOV , 1978				
01...	1115	47	2	.25
DEC				
05...	1315	231	5	3.1
JAN , 1979				
25...	1845	4250	204	2340
01381200 - ROCKAWAY R AT PINE BROOK NJ (LAT 40 51 29 LONG 074 20 53)				
JAN , 1979				
29...	1055	--	11	--
MAR				
15...	1130	--	86	--
MAY				
21...	1015	--	23	--
JUL				
10...	1045	--	11	--
13...	1535	--	76	--
AUG				
14...	0930	--	21	--
01381500 - WHIPPANY R AT MORRISTOWN NJ (LAT 40 48 21 LONG 074 27 22)				
OCT , 1978				
12...	1200	16	4	.17
NOV				
07...	1130	14	9	.34
FEB , 1979				
15...	1300	56	4	.60
MAR				
27...	1400	79	8	1.7
MAY				
31...	0920	114	12	3.7
JUL				
19...	1250	43	186	22
25...	1010	27	6	.44
AUG				
13...	1150	89	40	9.6
SEP				
12...	1300	42	9	1.0
01381800 - WHIPPANY R NR PINE BROOK NJ (LAT 40 50 42 LONG 074 20 51)				
JAN , 1979				
29...	1325	800	23	50
MAR				
15...	1310	--	116	--
MAY				
21...	1250	150	40	16
JUL				
10...	1335	47	17	2.2
13...	1130	19	15	.77
AUG				
14...	1150	215	77	45
01381900 - PASSAIC R AT PINE BROOK NJ (LAT 40 51 45 LONG 074 19 18)				
JUL , 1979				
11...	1520	123	48	16

ANALYSES OF SAMPLES COLLECTED AT SEDIMENT PARTIAL-RECORD STATIONS--Continued

SUSPENDED SEDIMENT DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
01382000 - PASSAIC R AT TWO BRIDGES NJ (LAT 40 53 50 LONG 074 16 23)				
FEB , 1979 15...	1105	--	6	--
MAR 15...	0930	--	104	--
JUN 07...	0850	--	40	--
JUL 17...	1145	--	32	--
AUG 20...	1010	--	55	--
01382500 - PEQUANNOCK R AT MACOPIN INTAKE DAM NJ (LAT 41 01 00 LONG 074 23 47				
OCT , 1978 31...	0840	3.2	2	.02
01383500 - WANAQUE R AT AWOSTING NJ (LAT 41 09 31 LONG 074 20 00)				
DEC , 1978 05...	1030	5.0	3	.04
JAN , 1979 27...	1215	456	1	1.2
01384000 - WANAQUE R AT MONKS NJ (LAT 41 07 14 LONG 074 17 41)				
JUL , 1979 26...	1145	10	4	.11
SEP 19...	1450	55	2	.30
01384500 - RINGWOOD C NR WANAQUE NJ (LAT 41 07 36 LONG 074 15 52)				
NOV , 1978 02...	0900	1.4	1	.00
01387000 - WANAQUE R AT WANAQUE NJ (LAT 41 02 33 LONG 074 17 36)				
NOV , 1978 08...	1300	18	1	.05
FEB , 1979 26...	1030	23	11	.68
MAR 19...	1315	106	1	.29
MAY 22...	1205	37	2	.20
JUL 11...	1015	19	2	.10
AUG 02...	1015	19	15	.77
SEP 27...	1145	18	5	.24

SUSPENDED SEDIMENT DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
01387500 - RAMAPO RIVER NEAR MAHWAH NJ (LAT 41 05 51 LONG 074 09 48)				
OCT , 1978				
02...	1100	25	13	.88
31...	1200	26	4	.28
FEB , 1979				
26...	1230	1550	27	113
MAR				
19...	1030	306	126	104
MAY				
22...	0915	167	11	5.0
JUL				
11...	1245	37	13	1.3
AUG				
02...	1245	22	5	.30
SEP				
18...	1500	82	5	1.1
27...	0900	136	6	2.2
01388500 - POMPTON R AT POMPTON PLAINS NJ (LAT 40 58 09 LONG 074 16 56)				
AUG , 1979				
08...	1000	119	7	2.2
SEP				
18...	1745	197	8	4.3
01388600 - POMPTON R PACKANACK LAKE, NJ (LAT 40 56 36 LONG 074 16 47)				
FEB , 1979				
22...	1150	--	5	--
APR				
04...	1020	--	146	--
JUN				
07...	1125	--	7	--
JUL				
17...	0935	--	10	--
AUG				
20...	1220	--	7	--
01389000 - POMPTON R AT TWO BRIDGES NJ (LAT 40 53 52 LONG 074 16 22)				
OCT , 1978				
02...	1315	--	8	--
01389900 - FLEISCHER BK AT MARKET ST AT ELMWOOD PARK NJ (LAT 40 53 57 LONG 074 19 19)				
JUL , 1979				
13...	1030	--	8	--
01391110 - SADDLE R AT PARAMUS NJ (LAT 40 56 47 LONG 074 05 56)				
OCT , 1978				
05...	1100	--	8	--
01391200 - SADDLE RIVER AT FAIR LAWN, NJ (LAT 40 56 30 LONG 074 05 36)				
FEB , 1979				
22...	1415	--	16	--
APR				
04...	1315	--	8	--
JUN				
12...	1055	--	17	--
JUL				
24...	1210	--	243	--
AUG				
07...	1155	--	13	--
SEP				
26...	1325	--	8	--

ANALYSES OF SAMPLES COLLECTED AT SEDIMENT PARTIAL-RECORD STATIONS--Continued

SUSPENDED SEDIMENT DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
01391500 - SADDLE R AT LODI NJ (LAT 40 53 25 LONG 074 04 51)				
NOV , 1978				
03...	0915	16	13	.56
FEB , 1979				
21...	1315	59	11	1.8
MAR				
22...	1400	109	6	1.8
JUN				
12...	1320	69	22	4.1
JUL				
10...	1040	32	12	1.0
23...	1215	26	165	12
AUG				
16...	1010	34	10	.92
SEP				
26...	1130	35	5	.47
01392210 - THIRD RIVER AT PASSAIC, NJ (LAT 40 49 47 LONG 074 09 46)				
OCT , 1978				
25...	1215	7.8	3	.06
DEC				
07...	0930	7.1	97	1.9
JAN , 1979				
18...	1015	14	49	1.9
JUL				
10...	1230	7.8	9	.19
01393450 - ELIZABETH R AT URSINO LAKE AT ELIZABETH NJ (LAT 40 40 33 LONG 074 13 22)				
OCT , 1978				
25...	1005	5.7	5	.08
NOV				
09...	1235	6.0	6	.10
DEC				
27...	1300	12	13	.42
FEB , 1979				
14...	1300	14	7	.26
APR				
05...	1010	19	142	7.3
JUN				
06...	1205	18	4	.19
JUL				
19...	1015	22	197	12
24...	1130	8.6	4	.09
AUG				
16...	1220	9.5	10	.26
SEP				
14...	1245	10	4	.11
01394500 - RAHWAY R NR SPRINGFIELD NJ (LAT 40 41 11 LONG 074 18 44)				
OCT , 1978				
25...	1210	4.7	1	.01
NOV				
09...	1650	3.8	2	.02
DEC				
21...	1400	66	20	3.6
FEB , 1979				
14...	1050	9.9	2	.05
APR				
03...	1105	18	3	.15
JUN				
06...	0930	21	5	.28
JUL				
18...	1025	18	11	.53
AUG				
07...	1315	7.2	9	.17
13...	1000	41	10	1.1
SEP				
14...	0945	6.2	7	.12
21...	1015	5.3	183	2.6

SUSPENDED SEDIMENT DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
01395000 - RAHWAY R AT RAHWAY NJ (LAT 40 37 05 LONG 074 17 00)				
FEB , 1979				
13...	1100	E11	3	--
MAR				
20...	1120	27	3	.22
MAY				
23...	1130	44	26	3.1
JUL				
06...	0925	9.2	5	.12
AUG				
06...	1025	6.7	4	.07
01396001 - ROBINSONS BRANCH AT MAPLE AVE AT RAHWAY NJ (LAT 40 36 26 LONG 074 17 40.01)				
DEC , 1978				
21...	1105	146	18	7.1
FEB , 1979				
13...	1300	6.8	8	.15
MAR				
20...	0940	12	5	.16
MAY				
23...	0910	9.6	6	.16
JUL				
18...	1210	53	10	1.4
AUG				
06...	1145	3.5	6	.06
SEP				
21...	1140	1.2	9	.03
01396090 - SB RARITAN R AT OUTLET OF BUDD LAKE NJ (LAT 40 51 38 LONG 074 45 38)				
JAN , 1979				
22...	1030	--	7	--
MAR				
19...	1015	--	6	--
MAY				
15...	1015	--	15	--
AUG				
01...	1040	--	17	--
01396280 - SB RARITAN R AT MIDDLE VALLEY NJ (LAT 40 45 40 LONG 074 49 18)				
JAN , 1979				
22...	1230	--	43	--
MAY				
15...	1300	--	7	--
AUG				
01...	1230	--	1	--
01396500 - SB RARITAN R NR HIGH BRIDGE NJ (LAT 40 40 40 LONG 074 52 45)				
OCT , 1978				
31...	1045	43	4	.46
DEC				
19...	1045	65	3	.53
APR , 1979				
25...	1230	110	15	4.5
JUL				
13...	1230	59	7	1.1
SEP				
27...	1130	117	120	38

ANALYSES OF SAMPLES COLLECTED AT SEDIMENT PARTIAL-RECORD STATIONS--Continued

SUSPENDED SEDIMENT DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)
01396535 - SB RARITAN R ARCH ST AT HIGH BRIDGE NJ (LAT 40 39 49 LONG 074 53 52)				
JAN , 1979				
22...	1350	540	22	32
MAR				
19...	1315	149	1	.40
MAY				
22...	1000	107	6	1.7
AUG				
01...	1340	80	4	.86
01396580 - SPRUCE RUN AT GLEN GARDNER, NJ (LAT 40 41 29 LONG 074 56 15)				
NOV , 1978				
02...	1750	6.2	4	.07
DEC				
20...	1045	8.0	1	.02
FEB , 1979				
26...	1405	163	59	26
APR				
17...	1155	26	2	.14
MAY				
29...	1315	30	8	.65
JUL				
11...	1200	7.0	2	.04
25...	1400	6.0	4	.06
SEP				
19...	1250	6.6	2	.04
01396588 - SPRUCE RUN NR GLEN GARDNER NJ (LAT 40 40 41 LONG 074 55 06.01)				
FEB , 1979				
13...	1010	--	3	--
APR				
09...	1010	--	2	--
AUG				
13...	1215	--	14	--
15...	1015	--	3	--
01396660 - MULHOCKAWAY C AT VAN SYCKEL NJ (LAT 40 38 51 LONG 074 58 09)				
OCT , 1978				
31...	1400	5.5	3	.04
DEC				
19...	1605	8.8	3	.07
FEB , 1979				
13...	1145	15	5	.20
MAR				
16...	1440	28	4	.30
APR				
09...	1145	26	4	.28
17...	1600	25	4	.27
MAY				
29...	1435	24	15	.97
31...	1320	26	5	.35
JUL				
11...	1500	7.1	29	.56
AUG				
06...	1430	7.1	43	.82
13...	1420	32	12	1.0
15...	1230	16	20	.86
SEP				
19...	1440	7.1	5	.10

ANALYSES OF SAMPLES COLLECTED AT SEDIMENT PARTIAL-RECORD STATIONS--Continued

SUSPENDED SEDIMENT DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
01396800 - SPRUCE RN AT CLINTON NJ (LAT 40 38 21 LONG 074 54 58)				
FEB , 1979				
13...	1320	142	8	3.1
APR				
09...	1330	8.7	103	2.4
MAY				
31...	1140	115	6	1.9
AUG				
15...	1340	61	9	1.5
SEP				
28...	1430	188	8	4.1
01397000 - SB RARITAN R AT STANTON NJ (LAT 40 34 21 LONG 074 52 10)				
OCT , 1978				
18...	1400	114	4	1.2
MAR , 1979				
14...	1530	500	7	9.4
APR				
25...	1600	230	12	7.5
JUL				
13...	1415	144	2	.78
SEP				
27...	1600	261	108	76
01397100 - PRESCOTT BK AT ROUND VALLEY NJ (LAT 40 36 28 LONG 074 50 54)				
JAN , 1979				
25...	1320	--	4	--
MAR				
22...	1400	--	1	--
MAY				
11...	1505	1.1	71	.21
21...	1330	--	4	--
JUL				
24...	1320	--	170	--
SEP				
25...	1500	--	2	--
01397380 - BUSHKILL AT ROCKEFELLOWS MILLS NJ (LAT 40 31 15 LONG 074 49 40)				
MAR , 1979				
01...	1330	--	50	--
APR				
24...	1425	--	6	--
MAY				
31...	1310	--	11	--
01397400 - SB RARITAN R AT THREE BRIDGES NJ (LAT 40 31 01 LONG 074 48 12)				
FEB , 1979				
05...	1015	285	13	10
MAR				
28...	1000	390	107	113
MAY				
22...	1150	204	13	7.2
AUG				
08...	1145	73	10	2.0
SEP				
25...	1050	305	9	7.4

ANALYSES OF SAMPLES COLLECTED AT SEDIMENT PARTIAL-RECORD STATIONS--Continued

SUSPENDED SEDIMENT DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

01398000 - NESHANIC R AT REAVILLE NJ (LAT 40 28 18 LONG 074 49 42)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
OCT , 1978				
04...	1130	2.5	6	.04
FEB , 1979				
05...	1230	37	18	1.8
MAR				
13...	1315	58	6	.94
28...	1215	32	3	.26
APR				
26...	1305	19	6	.31
MAY				
22...	1335	16	7	.30
JUL				
20...	1530	22	9	.53
AUG				
08...	1350	15	8	.32
SEP				
05...	1300	4.8	53	.69
25...	1310	43	4	.46

01398045 - BACK BK TRIB NEAR RINGOES NJ (LAT 40 25 41 LONG 074 49 52)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
OCT , 1978				
04...	1340	.06	6	.00
MAR , 1979				
15...	1140	2.0	1	.01

01398102 - SB RARITAN R AT SOUTH BRANCH NJ (LAT 40 32 48 LONG 074 41 48)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
FEB , 1979				
05...	1350	712	59	113
MAR				
28...	1340	514	106	147
MAY				
31...	1120	652	26	46

01398107 - HOLLAND BK AT READINGTON NJ (LAT 40 33 30 LONG 074 43 50)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
OCT , 1978				
13...	1345	20	3	.16
NOV				
13...	1215	1.1	5	.01
MAR , 1979				
22...	1530	23	4	.25
AUG				
13...	1015	20	25	1.3
SEP				
14...	1545	4.8	5	.06

01398260 - NB RARITAN R NR CHESTER NJ (LAT 40 46 16 LONG 074 37 34)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
JAN , 1979				
29...	1020	--	5	--
MAR				
21...	1020	--	1	--
MAY				
17...	1000	--	3	--
AUG				
06...	1030	--	8	--

SUSPENDED SEDIMENT DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
01398500 - NB RARITAN R NR FAR HILLS NJ (LAT 40 42 30 LONG 074 38 11)				
OCT , 1978				
12...	1415	15	9	.36
NOV				
09...	1515	11	5	.15
DEC				
19...	1130	16	6	.26
JAN , 1979				
29...	1230	131	7	2.5
MAR				
21...	1200	72	2	.39
22...	1145	57	3	.46
MAY				
02...	1500	57	37	5.7
17...	1145	40	6	.65
JUL				
31...	1320	17	6	.28
AUG				
06...	1245	40	11	1.2
SEP				
21...	1015	22	26	1.5
01399120 - NB RARITAN R AT BURNT MILLS NJ (LAT 40 38 09 LONG 074 40 56)				
JAN , 1979				
29...	1350	400	11	12
MAR				
21...	1345	142	96	37
MAY				
17...	1330	63	5	.85
AUG				
06...	1400	45	15	1.8
01399190 - LAMINGTON RIVER AT SUCCASUNNA, NJ (LAT 40 51 03 LONG 074 38 02)				
OCT , 1978				
03...	1315	3.9	4	.04
18...	1410	3.7	6	.06
NOV				
07...	1205	3.1	5	.04
DEC				
18...	1125	5.5	4	.06
MAR , 1979				
15...	1230	23	4	.25
APR				
02...	1600	16	3	.13
MAY				
22...	1400	11	16	.48
JUL				
20...	1230	10	8	.22
SEP				
06...	1320	74	194	39
25...	1200	15	3	.12

ANALYSES OF SAMPLES COLLECTED AT SEDIMENT PARTIAL-RECORD STATIONS--Continued

SUSPENDED SEDIMENT DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
01399200 - LAMINGTON (BLACK) R NR IRONIA NJ (LAT 40 50 07 LONG 074 38 40)				
OCT , 1978				
03...	1030	5.3	5	.07
18...	1620	5.4	4	.06
NOV				
07...	1345	4.8	6	.08
DEC				
18...	1335	9.5	31	.80
FEB , 1979				
22...	1045	E19	60	3.1
MAR				
13...	1400	42	1	.11
APR				
02...	1300	27	6	.44
11...	1015	34	3	.28
24...	1230	19	32	1.6
MAY				
30...	1000	12	--	--
JUL				
20...	1120	14	13	.49
AUG				
14...	1015	27	3	.22
SEP				
06...	1550	124	15	5.0
20...	1215	12	7	.23
01399500 - LAMINGTON (BLACK) R NR POTTERSVILLE NJ (LAT 40 43 39 LONG 074 43 50)				
OCT , 1978				
24...	0835	15	3	.12
DEC				
15...	1310	41	3	.33
JAN , 1979				
25...	1205	874	154	363
FEB				
22...	1240	E74	13	--
MAR				
14...	1400	133	7	2.5
APR				
11...	1230	84	2	.45
MAY				
30...	1220	105	12	3.4
31...	1230	92	14	3.5
AUG				
14...	1230	47	8	1.0
SEP				
20...	1545	43	10	1.2
01399510 - UPPER COLD BK NR POTTERSVILLE NJ (LAT 40 43 16 LONG 074 45 09)				
APR , 1979				
11...	1615	4.2	3	.03
SEP				
21...	1530	3.0	12	.10
01399525 - LAMINGTON TRIB NO.2 NR POTTERSVILLE NJ (LAT 40 41 40 LONG 074 43 05)				
OCT , 1978				
24...	0915	.53	4	.01
DEC				
15...	1040	.94	3	.01
SEP , 1979				
06...	1700	7.9	29	.62
21...	1310	.89	11	.03

ANALYSES OF SAMPLES COLLECTED AT SEDIMENT PARTIAL-RECORD STATIONS--Continued

SUSPENDED SEDIMENT DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
01399545 - LAMINGTON R AT LAMINGTON NJ (LAT 40 39 38 LONG 074 43 46)				
JAN , 1979				
25...	1200	994	175	470
26...	1110	666	73	131
FEB				
22...	1350	--	50	--
APR				
11...	1330	109	115	34
MAY				
30...	1330	136	10	3.7
AUG				
14...	1340	109	4	1.2
01399600 - SB ROCKAWAY C TR AT LEBANON NJ (LAT 40 38 05 LONG 074 49 58)				
JAN , 1979				
25...	1150	2.1	10	.06
MAR				
22...	1145	1.1	1	.00
MAY				
09...	1500	14	18	.68
21...	1150	1.3	1	.00
JUL				
24...	1145	1.6	156	.67
SEP				
25...	1400	--	3	--
01399690 - SB ROCKAWAY C AT WHITEHOUSE NJ (LAT 40 37 24 LONG 074 46 01)				
OCT , 1978				
03...	1100	7.1	11	.21
04...	1130	7.1	21	.40
06...	0130	7.7	50	1.0
NOV				
02...	1300	6.5	16	.28
DEC				
14...	1540	12	14	.45
FEB , 1979				
08...	1300	16	6	.28
26...	1215	232	211	132
MAY				
08...	1300	13	11	.39
JUL				
02...	1250	12	16	.52
SEP				
20...	1145	48	10	1.3
01399700 - ROCKAWAY C AT WHITEHOUSE NJ (LAT 40 37 49 LONG 074 44 11)				
OCT , 1978				
03...	1130	12	1	.03
05...	1230	16	32	1.4
06...	0220	14	32	1.2
06...	0850	16	25	1.1
11...	1445	12	6	.19
NOV				
03...	1330	15	5	.20
24...	2230	37	6	.60
DEC				
05...	1130	110	13	3.9
JAN , 1979				
25...	0950	602	184	299
MAR				
22...	1015	51	151	21
MAY				
08...	1700	46	5	.62
21...	1000	44	9	1.1
JUL				
02...	1435	37	5	.50
24...	1000	32	8	.69
SEP				
20...	1345	64	6	1.0
25...	1100	89	5	1.2

SUSPENDED SEDIMENT DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
01399780 - LAMINGTON (BLACK) R AT BURNT MILLS NJ (LAT 40 38 04 LONG 074 41 13)				
MAR , 1979				
01...	1045	450	55	67
APR				
25...	1410	146	5	2.0
MAY				
31...	0950	265	11	7.9
01399830 - NB RARITAN R AT NORTH BRANCH NJ (LAT 40 36 00 LONG 074 40 27)				
OCT , 1978				
04...	1430	62	1	.17
NOV				
03...	0830	58	1	.16
APR , 1979				
06...	1200	340	8	7.3
MAY				
22...	1230	194	8	4.2
JUL				
11...	1130	158	8	3.4
SEP				
20...	1530	194	3	1.6
01400000 - NB RARITAN R NR RARITAN NJ (LAT 40 34 10 LONG 074 40 45)				
OCT , 1978				
12...	1445	61	1	.16
NOV				
03...	1115	62	2	.33
MAR , 1979				
23...	1150	292	3	2.4
MAY				
29...	1400	453	13	16
JUL				
12...	1200	95	6	1.5
SEP				
14...	1740	180	43	21
01400120 - RARITAN R AT RARITAN NJ (LAT 40 33 52 LONG 074 38 10)				
FEB , 1979				
28...	1245	3150	43	366
APR				
19...	1230	751	157	318
MAY				
31...	1030	1190	3	9.6
JUL				
19...	1115	728	232	456
AUG				
02...	1245	150	23	9.3
10...	1530	243	13	8.5
01400300 - PETERS BK NR RARITAN NJ (LAT 40 35 35 LONG 074 40 00)				
OCT , 1978				
13...	1415	.20	4	.00
NOV				
13...	0945	.28	49	.04
MAR , 1979				
06...	1735	153	140	58
MAY				
24...	1400	50	63	8.5

SUSPENDED SEDIMENT DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
01400500 - RARITAN R AT MANVILLE NJ (LAT 40 33 18 LONG 074 35 02)				
FEB , 1979				
13...	1115	E523	6	--
APR				
19...	1000	E1030	75	--
JUL				
10...	1130	264	16	11
17...	1200	1640	764	3380
AUG				
01...	1130	323	23	20
02...	1015	269	19	14
SEP				
18...	1145	328	16	14
01400510 - RARITAN R NR MANVILLE NJ (LAT 40 32 34 LONG 074 34 03)				
DEC , 1978				
27...	1400	--	10	--
MAY , 1979				
04...	1540	--	12	--
JUN				
11...	1030	--	8	--
01400560 - MILLSTONE R AT APPLEGARTH NJ (LAT 40 16 28 LONG 074 28 22)				
FEB , 1979				
22...	0945	--	8	--
APR				
10...	1000	--	5	--
MAY				
30...	1130	--	23	--
JUL				
11...	1225	--	10	--
AUG				
06...	1010	--	10	--
01400650 - MILLSTONE R AT GROVERS MILL NJ (LAT 40 19 19 LONG 074 36 31)				
FEB , 1979				
22...	1200	--	23	--
APR				
12...	1030	--	23	--
JUN				
12...	1030	--	22	--
JUL				
11...	1435	--	12	--
AUG				
06...	1155	--	14	--
01401000 - STONY BK AT PRINCETON NJ (LAT 40 19 59 LONG 074 40 56)				
OCT , 1978				
06...	1230	17	2	.09
DEC				
20...	1500	28	8	.60
JAN , 1979				
31...	0945	E45	10	--
MAR				
20...	1315	41	3	.33
APR				
05...	1300	114	6	1.8
JUN				
18...	1030	32	1	.09
JUL				
03...	1550	9.0	30	.73
23...	1045	9.5	159	4.1
AUG				
08...	1430	30	8	.65
SEP				
19...	1500	13	2	.07

SUSPENDED SEDIMENT DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

01401200 - DUCK POND RN AT CLARKSVILLE NJ (LAT 40 18 24 LONG 074 40 06)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
JUN , 1979				
12...	1215	12	8	.26

01401400 - HEATHCOTE BK AT KINGSTON NJ (LAT 40 22 10 LONG 074 36 59)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
FEB , 1979				
14...	1215	--	6	--
MAR				
28...	1030	8.8	7	.17
JUN				
13...	1300	7.2	3	.06
JUL				
16...	1120	8.0	5	.11
AUG				
01...	1345	7.6	3	.06
14...	1110	8.2	6	.13

01401440 - MILLSTONE R AT KINGSTON NJ (LAT 40 22 24 LONG 074 37 15)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
FEB , 1979				
14...	0945	--	7	--
APR				
05...	1000	--	19	--
JUN				
13...	1000	--	17	--
JUL				
16...	1400	--	31	--
AUG				
06...	1355	--	23	--

01401600 - BEDEN BK NR ROCKY HILL NJ (LAT 40 24 52 LONG 074 39 02)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
JAN , 1979				
31...	1125	80	7	1.6
MAR				
27...	1115	58	5	.78
MAY				
31...	1400	76	4	.82
JUN				
08...	1515	125	2	.67
JUL				
19...	1415	62	199	33
AUG				
08...	1215	40	3	.32
10...	1200	32	1	.09

01402000 - MILLSTONE R AT BLACKWELLS MILLS NJ (LAT 40 28 30 LONG 074 34 34)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
OCT , 1978				
23...	1245	63	11	1.9
MAR , 1979				
20...	0945	292	20	16
MAY				
02...	1400	220	20	12
JUL				
24...	1545	107	27	7.8
SEP				
18...	1520	143	26	10

SUSPENDED SEDIMENT DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
01402540 - MILLSTONE R AT WESTON NJ (LAT 40 31 47 LONG 074 35 19)				
FEB , 1979				
28...	1030	--	47	--
APR				
12...	1345	--	14	--
JUN				
11...	1330	--	13	--
JUL				
23...	1300	--	163	--
AUG				
08...	1015	--	31	--
01403060 - RARITAN R BL CALCO DAM AT BOUND BROOK NJ (LAT 40 33 05 LONG 074 32 54)				
OCT , 1978				
02...	1210	188	12	6.1
NOV				
08...	1200	155	6	2.5
SEP , 1979				
19...	1230	362	17	17
01403150 - WB MIDDLE BK NR MARTINSVILLE NJ (LAT 40 35 27 LONG 074 36 43)				
AUG , 1979				
13...	1230	1.6	11	.05
SEP				
06...	1410	6.0	72	1.2
01403400 - GREEN BK AT SEELEY MILLS NJ (LAT 40 39 53 LONG 074 24 10)				
JUN , 1979				
12...	1640	E9.8	2	--
SEP				
10...	1300	3.5	22	.21
01403500 - GREEN BK AT PLAINFIELD NJ (LAT 40 36 53 LONG 074 25 55)				
OCT , 1978				
03...	1415	2.2	12	.07
NOV				
02...	1145	.20	2	.00
FEB , 1979				
09...	1330	6.7	3	.05
APR				
30...	1600	10	5	.13
JUL				
02...	1415	3.0	12	.10
SEP				
06...	1100	5.6	391	5.9
21...	1145	.47	19	.02
01403540 - STONY BK AT WATCHUNG NJ (LAT 40 38 12 LONG 074 27 06)				
OCT , 1978				
12...	0945	.89	4	.01
NOV				
02...	0930	1.1	5	.01
MAR , 1979				
08...	1345	29	9	.70
APR				
30...	1330	10	10	.27
JUL				
02...	1220	2.7	31	.23
AUG				
30...	1120	2.3	3	.02

SUSPENDED SEDIMENT DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
01403570 - STONY BK AT N PLAINFIELD NJ (LAT 40 37 19 LONG 074 26 11)				
SEP , 1979				
06...	1300	167	83	37
01404302 - LAWRENCE BK,DAVIDSONS MILL RD NR PATRICKS CORNER (LAT 40 24 58 LONG 074 29 38)				
FEB , 1979				
15...	0945	13	6	.21
APR				
10...	1330	34	10	.92
JUN				
06...	1130	23	7	.43
JUL				
18...	1250	93	44	11
AUG				
07...	1340	12	26	.84
14...	1315	17	8	.37
01405000 - LAWRENCE BK AT FARRINGTON DAM NJ (LAT 40 27 00 LONG 074 27 05)				
OCT , 1978				
11...	1430	9.9	7	.19
NOV				
13...	1315	12	14	.45
DEC				
22...	1515	48	38	4.9
JUN , 1979				
01...	1530	49	17	2.2
AUG				
29...	1600	18	4	.19
SEP				
20...	1100	14	6	.23
01405030 - LAWRENCE BK AT WESTONS MILLS NJ (LAT 40 28 59 LONG 074 24 45)				
OCT , 1978				
02...	1230	--	8	--
JAN , 1979				
30...	1235	--	35	--
APR				
11...	1000	--	8	--
JUN				
14...	1030	--	1	--
JUL				
12...	1310	--	4	--
AUG				
07...	1150	--	20	--
01405240 - MATCHAPONIX BK NR ENGLISHTOWN NJ (LAT 40 19 21 LONG 074 21 35)				
FEB , 1979				
14...	1120	--	14	--
APR				
02...	1030	94	101	26
MAY				
18...	1030	29	13	1.0
01405285 - BARCLAY BK NR ENGLISHTOWN NJ (LAT 40 20 53 LONG 074 21 27)				
APR , 1979				
02...	1150	9.4	102	2.6
MAY				
02...	1240	4.8	8	.10
18...	0900	2.5	18	.12

ANALYSES OF SAMPLES COLLECTED AT SEDIMENT PARTIAL-RECORD STATIONS--Continued

SUSPENDED SEDIMENT DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
01405302 - MATCHAPONIX BK AT MUNDY AVE AT SPOTSWOOD NJ (LAT 40 23 22 LONG 074 22 55)				
APR , 1979				
02...	1340	80	97	21
MAY				
29...	1045	152	136	56
01405340 - MANALPAN BK AT FEDERAL RD NR MANALAPAN NJ (LAT 40 17 46 LONG 074 23 53)				
MAY , 1979				
03...	0950	--	10	--
29...	1230	--	23	--
01405400 - MANALAPAN BK AT SPOTSWOOD NJ (LAT 40 23 22 LONG 074 23 27)				
OCT , 1978				
11...	1045	29	7	.55
NOV				
16...	1215	27	11	.80
DEC				
21...	1245	78	12	2.5
JUN , 1979				
01...	1200	81	7	1.5
AUG				
29...	1215	58	10	1.6
SEP				
20...	1400	31	391	33
01405440 - MANALAPAN BK AT BRIDGE ST AT SPOTSWOOD NJ (LAT 40 23 26 LONG 074 23 26)				
FEB , 1979				
14...	1330	--	2	--
MAY				
03...	1040	--	14	--
29...	0930	--	16	--
01405500 - SOUTH R AT OLD BRIDGE NJ (LAT 40 24 22 LONG 074 22 08)				
OCT , 1978				
02...	1000	82	53	12
01405700 - SOUTH R BL DUHERNAL DAM AT OLD BRIDGE NJ (LAT 40 25 00 LONG 074 21 43)				
JAN , 1979				
30...	1000	--	19	--
APR				
11...	1300	--	84	--
JUN				
14...	1330	--	12	--
JUL				
18...	1010	--	10	--
AUG				
07...	1020	--	42	--
01407253 - WILLOW BK NR HOLMDEL NJ (LAT 40 19 47 LONG 074 10 26)				
FEB , 1979				
28...	1200	--	171	--
APR				
19...	1150	--	83	--
MAY				
09...	1325	9.7	20	.52
22...	1240	--	28	--
24...	1240	26	154	11
JUL				
12...	1320	7.5	147	3.0

SUSPENDED SEDIMENT DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
01407290 - BIG BK NR MARLBORO NJ (LAT 40 19 10 LONG 074 12 52)				
SEP , 1979				
05...	1250	8.9	71	1.7
01407400 - YELLOW BK AT COLTS NECK NJ (LAT 40 17 47 LONG 074 10 16)				
FEB , 1979				
28...	1030	--	48	--
APR				
19...	1330	--	12	--
MAY				
22...	0930	--	28	--
24...	1045	--	17	--
JUL				
12...	1125	--	127	--
01407500 - SWIMMING R NR RED BANK NJ (LAT 40 19 10 LONG 074 06 55)				
OCT , 1978				
05...	1020	9.9	7	.19
FEB , 1979				
28...	1330	220	80	48
APR				
18...	0815	69	9	1.7
19...	1015	63	6	1.0
MAY				
22...	1040	57	6	.92
JUL				
17...	0910	8.6	175	4.1
SEP				
13...	0950	15	--	--
01407705 - SHARK R NR NEPTUNE CITY NJ (LAT 40 11 56 LONG 074 04 18)				
OCT , 1978				
16...	1135	12	5	.16
NOV				
28...	1310	31	16	1.3
JAN , 1979				
05...	1230	7.1	6	.12
FEB				
27...	1045	95	46	12
MAR				
12...	1340	30	10	.81
APR				
16...	1200	21	2	.11
23...	1340	19	7	.36
MAY				
25...	1020	66	21	3.7
JUL				
17...	1300	5.1	168	2.3
AUG				
03...	1000	14	11	.42
SEP				
18...	1110	7.6	8	.16

ANALYSES OF SAMPLES COLLECTED AT SEDIMENT PARTIAL-RECORD STATIONS--Continued

SUSPENDED SEDIMENT DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
01407760 - JUMPING BK NR NEPTUNE CITY NJ (LAT 40 12 13 LONG 074 03 58)				
OCT , 1978				
16...	1235	3.2	7	.06
NOV				
28...	0925	15	11	.45
JAN , 1979				
18...	1100	8.9	10	.24
FEB				
27...	1045	52	20	2.8
APR				
16...	1000	13	3	.11
23...	1245	6.0	8	.13
MAY				
25...	0915	34	146	13
JUN				
14...	1025	5.2	5	.07
AUG				
03...	1115	7.9	30	.64
SEP				
18...	1235	3.2	9	.08
01407830 - MANASQUAN R NR GEORGIA NJ (LAT 40 12 36 LONG 074 16 41)				
OCT , 1978				
10...	1045	--	21	--
NOV				
29...	0915	11	42	1.2
FEB , 1979				
26...	1030	--	153	--
APR				
10...	1145	--	135	--
MAY				
10...	1035	9.8	39	1.0
21...	1040	--	37	--
JUL				
13...	0835	5.8	128	2.0
17...	1015	--	5	--
01407997 - MARSH BOG BK AT SQUANKUM NJ (LAT 40 10 01 LONG 074 09 33)				
OCT , 1978				
07...	1400	--	44	--
NOV				
29...	1315	7.0	10	.19
FEB , 1979				
26...	1400	120	99	32
APR				
10...	1020	15	17	.69
MAY				
21...	0915	15	23	.93
JUL				
13...	1115	1.6	150	.65
01408000 - MANASQUAN R AT SQUANKUM NJ (LAT 40 09 47 LONG 074 09 21)				
OCT , 1978				
05...	1300	62	156	26
13...	0940	45	11	1.3
NOV				
30...	1015	171	139	64
MAR , 1979				
13...	1235	177	18	8.6
MAY				
01...	1030	81	21	4.6
21...	1200	115	31	9.6
JUL				
16...	1055	41	131	15
SEP				
19...	1035	46	70	8.7

SUSPENDED SEDIMENT DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
01408070 - NB METEDECONK R NR WYCKOFF MILLS N. J. (LAT 40 10 52 LONG 074 17 17)				
NOV , 1978				
29...	1105	11	10	.30
FEB , 1979				
26...	1200	138	16	6.0
APR				
10...	1340	18	88	4.3
MAY				
10...	1145	4.8	9	.12
21...	1230	14	10	.38
JUL				
13...	0945	2.0	186	1.0
17...	1130	1.6	16	.07
01408120 - NB METEDECONK R NR LAKEWOOD NJ (LAT 40 05 30 LONG 074 09 10)				
OCT , 1978				
13...	1145	40	5	.54
NOV				
30...	1255	86	15	3.5
MAY , 1979				
01...	1335	63	16	2.7
07...	1155	49	10	1.3
JUN				
14...	1305	53	7	1.0
JUL				
16...	1305	35	129	12
AUG				
20...	0940	47	13	1.6
SEP				
19...	1205	41	17	1.9
01409095 - OYSTER C NR BROOKVILLE NJ (LAT 39 47 54 LONG 074 15 02)				
OCT , 1978				
01...	0945	28	2	.15
NOV				
16...	1025	21	4	.23
MAR , 1979				
06...	1330	82	1	.22
APR				
12...	0910	42	1	.11
MAY				
23...	0955	36	1	.10
JUL				
20...	1105	33	132	12
AUG				
03...	1115	26	2	.14
21...	1040	23	192	12
SEP				
20...	1240	23	3	.19
01409280 - WESTECUNK C AT STAFFORD FORGE NJ (LAT 39 39 55 LONG 074 19 11)				
OCT , 1978				
04...	1150	28	2	.15
NOV				
16...	1305	27	8	.58
MAR , 1979				
07...	1305	213	5	2.9
APR				
12...	1110	44	1	.12
MAY				
23...	1200	56	1	.15
JUL				
23...	1045	32	152	13
SEP				
21...	1220	25	2	.13

ANALYSES OF SAMPLES COLLECTED AT SEDIMENT PARTIAL-RECORD STATIONS--Continued

SUSPENDED SEDIMENT DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

01409387 - MULLICA R AT OUTLET OF ATSION LK AT ATSION NJ (LAT 39 44 25 LONG 074 43 37)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
FEB , 1979				
06...	1015	--	3	--
APR				
05...	1015	--	114	--
MAY				
16...	1245	--	7	--
AUG				
02...	0945	--	7	--

01409400 - MULLICA R NR BATSTO NJ (LAT 39 40 28 LONG 074 39 55)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
OCT , 1978				
05...	1215	47	10	1.3
NOV				
21...	1205	45	7	.85
MAR , 1979				
21...	1410	145	6	2.3
MAY				
09...	1420	105	12	3.4
JUN				
15...	1120	154	4	1.7
SEP				
26...	1030	92	8	2.0

01409416 - HAMMONTON CK AT WESCOATVILLE NJ (LAT 39 38 02 LONG 074 43 05.01)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
OCT , 1978				
10...	1015	22	16	.95
NOV				
22...	0935	9.7	4	.10
JAN , 1979				
31...	1310	24	6	.39
APR				
11...	1315	22	10	.59
JUN				
12...	1245	53	9	1.3
JUL				
12...	1000	27	11	.80
AUG				
13...	1000	50	10	1.3
SEP				
25...	1030	35	6	.57

01409500 - BATSTO R AT BATSTO NJ (LAT 39 38 33 LONG 074 39 00)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
OCT , 1978				
04...	1030	74	9	1.8
05...	1010	68	1	.18
NOV				
21...	0955	69	2	.37
22...	1105	63	4	.68
JAN , 1979				
04...	1120	208	3	1.7
FEB				
06...	1345	173	1	.47
MAR				
21...	1140	164	6	2.7
APR				
05...	1320	157	91	39
19...	1150	162	7	3.1
MAY				
16...	0945	473	5	6.4
JUN				
13...	0950	164	3	1.3
AUG				
08...	1115	127	10	3.4
SEP				
12...	0950	118	11	3.5

ANALYSES OF SAMPLES COLLECTED AT SEDIMENT PARTIAL-RECORD STATIONS--Continued

SUSPENDED SEDIMENT DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
01409535 - MULLICA RIVER AT GREEN BANK NJ (LAT 39 36 43 LONG 074 35 22)				
OCT , 1978				
04...	1130	--	18	--
01409810 - WEST BRANCH WADING RIVER NEAR JENKINS NJ (LAT 39 41 17 LONG 074 32 54)				
OCT , 1978				
11...	0945	90	9	2.2
NOV				
17...	0915	64	6	1.0
APR , 1979				
25...	1430	125	4	1.3
JUN				
26...	1310	103	10	2.8
JUL				
26...	1300	400	12	13
SEP				
12...	1215	119	9	2.9
01410000 - OSWEGO R AT HARRISVILLE NJ (LAT 39 39 47 LONG 074 31 26)				
OCT , 1978				
04...	1345	65	8	1.4
NOV				
06...	0930	78	2	.42
17...	1100	54	2	.29
JAN , 1979				
08...	1330	200	10	5.4
FEB				
26...	1050	828	7	16
APR				
13...	0850	119	2	.64
17...	1045	145	7	2.7
JUN				
01...	0940	264	6	4.3
01...	1050	250	3	2.0
JUL				
31...	1135	93	7	1.8
AUG				
13...	1100	145	6	2.3
01410150 - EB BASS R NR NEW GRETNA NJ (LAT 39 37 23 LONG 074 26 30)				
OCT , 1978				
04...	1300	15	13	.53
06...	1145	14	2	.08
NOV				
17...	1325	12	1	.03
JAN , 1979				
08...	1200	37	8	.80
FEB				
26...	1250	148	5	2.0
APR				
13...	1110	23	4	.25
JUN				
01...	1100	25	1	.07
01...	1350	25	3	.20
AUG				
13...	1315	26	3	.21
17...	0925	12	9	.29
SEP				
21...	1040	11	115	3.4

SUSPENDED SEDIMENT DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
01410500 - ABSECON C AT ABSECON NJ (LAT 39 25 45 LONG 074 31 16)				
OCT , 1978				
25...	1120	14	2	.08
DEC				
07...	1055	25	4	.27
JAN , 1979				
10...	1505	34	8	.73
APR				
19...	0840	37	3	.30
JUN				
05...	1100	56	3	.45
JUL				
18...	0850	12	134	4.3
AUG				
15...	1005	30	4	.32
01410784 - GREAT EGG HARBOR R NR SICKLERVILLE NJ (LAT 39 44 02 LONG 074 57 05)				
OCT , 1978				
05...	0945	8.9	5	.12
DEC				
05...	0910	35	24	2.3
06...	1510	37	10	1.0
JAN , 1979				
17...	1115	20	9	.49
18...	1130	19	5	.26
MAR				
15...	1040	31	14	1.2
JUN				
13...	0920	46	4	.50
JUL				
19...	1030	17	43	2.0
24...	1045	10	4	.11
AUG				
15...	1100	17	8	.37
01410787 - GREAT EGG HARBOR R TR AT SICKLERVILLE NJ (LAT 39 43 31 LONG 074 57 39)				
OCT , 1978				
06...	0025	.29	11	.01
06...	0635	.29	8	.01
18...	1510	.36	13	.01
NOV				
22...	1600	.23	11	.01
DEC				
05...	1110	2.9	16	.13
JAN , 1979				
10...	1250	2.0	15	.08
MAR				
15...	0905	3.1	13	.11
APR				
17...	1130	2.1	16	.09
JUN				
07...	0835	1.6	6	.03
JUL				
24...	1200	.76	32	.07
SEP				
11...	0830	.53	10	.01

ANALYSES OF SAMPLES COLLECTED AT SEDIMENT PARTIAL-RECORD STATIONS--Continued

SUSPENDED SEDIMENT DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
01410789 - GREAT EGG HARBOR R TR 2 AT WINSLOW CROSSING NJ (LAT 39 42 17 LONG 074 57 01)				
OCT , 1978				
18...	1235	.49	4	.01
DEC				
06...	1215	1.1	10	.03
JAN , 1979				
15...	1500	1.5	14	.06
MAR				
15...	1310	1.3	11	.04
APR				
17...	0930	1.0	39	.11
JUN				
07...	1005	1.2	4	.01
SEP				
11...	1120	.62	6	.01
01410803 - FOURMILE B AT WINSLOW CROSSING NJ (LAT 39 42 07 LONG 074 58 11)				
DEC , 1978				
05...	1130	--	21	--
01410810 - FOURMILE B AT NEW BROOKLYN NJ (LAT 39 41 47 LONG 074 56 25)				
OCT , 1978				
06...	0040	6.3	4	.07
06...	0645	6.3	6	.10
19...	1730	7.2	5	.10
NOV				
28...	1300	9.8	7	.19
DEC				
05...	1445	24	18	1.2
JAN , 1979				
15...	1200	17	7	.32
MAR				
15...	1125	21	5	.28
MAY				
02...	1125	13	9	.32
JUN				
07...	1155	15	5	.20
JUL				
25...	1045	11	2	.06
SEP				
11...	0955	10	15	.40
01410820 - GREAT EGG HARBOR R NR BLUE ANCHOR NJ (LAT 39 40 09 LONG 074 54 49)				
OCT , 1978				
05...	1200	31	4	.33
19...	1315	27	2	.15
NOV				
29...	1120	50	7	.94
DEC				
05...	1100	81	10	2.2
JAN , 1979				
16...	1420	76	6	1.2
18...	1255	62	5	.84
MAR				
20...	1030	78	4	.84
MAY				
31...	1310	79	4	.85
JUN				
13...	1130	121	8	2.6
JUL				
17...	1130	33	4	.36
25...	0900	56	4	.60
AUG				
15...	1300	69	4	.75
SEP				
28...	0900	41	4	.44
28...	1215	41	4	.44

SUSPENDED SEDIMENT DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

01411110 - GREAT EGG HARBOR R AT WEYMOUTH NJ (LAT 39 30 50 LONG 074 46 47)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
NOV , 1978				
30...	1105	--	3	--
APR , 1979				
11...	1030	--	90	--
JUN				
12...	0945	--	8	--
JUL				
11...	1030	--	21	--
26...	1340	--	10	--
AUG				
13...	1230	--	12	--

01411140 - DEEP RN AT WEYMOUTH NJ (LAT 39 30 26 LONG 074 46 56)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
OCT , 1978				
10...	1245	--	5	--

01411170 - GREAT EGG HARBOR R AT MAYS LANDING NJ (LAT 39 27 13 LONG 074 44 04)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
OCT , 1978				
11...	1100	--	3	--

01411300 - TUCKAHOE R AT HEAD OF RIVER NJ (LAT 39 18 25 LONG 074 49 15)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
OCT , 1978				
11...	1330	17	1	.05
26...	1305	19	2	.10
NOV				
24...	1155	26	3	.21
FEB , 1979				
13...	1115	47	5	.63
MAR				
09...	1330	240	98	64
APR				
04...	1015	89	3	.72
JUN				
06...	1215	139	3	1.1
11...	1300	62	2	.33
JUL				
05...	1100	53	14	2.0
19...	1130	71	141	27
AUG				
02...	1100	24	3	.19
SEP				
14...	0900	24	5	.32
26...	1030	31	4	.33

393825074393500 - MULLICA R AT PLEASANT MILLS NJ (LAT 39 38 25 LONG 074 39 35)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
FEB , 1979				
06...	1240	--	9	--
MAY				
16...	1050	--	17	--
AUG				
08...	1215	--	50	--

394203074562901 - W OUT NEW BROOKLYN LA AT WINSLOW CROSSING NJ (LAT 39 42 03 LONG 074 56 29.01)

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
DEC , 1978				
05...	1315	--	23	--

ATLANTIC COUNTY

392436074303501. Local I.D., Atlantic City W.D. 600 Obs. Unique Well Number, 01-0566.

LOCATION.--Lat 39°24'34", long 74°30'32", Hydrologic Unit 02040302, at the pumping station on Route 585 between Absecon and Pleasantville.
Owner: Atlantic City Water Department.

AQUIFER.--Lower ("800-foot") sand in Kirkwood Formation of Miocene Age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 8 in (203 mm), depth cased 692 ft (210.9 m), length of screen unknown.

INSTRUMENTATION.--Water-level extremes recorder. 1925 to May 1940, February 1950 to August 1974, water-level recorder.

DATUM.--Land-surface datum is 11.7 ft (3.57 m) National Geodetic Vertical Datum of 1929.
Measuring point: Front edge of cutout in recorder housing, 3.08 ft (0.939 m) above land-surface datum.

PERIOD OF RECORD.--1925 to May 1940, February 1950 to August 1974, May 1977 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 14.83 ft (4.520 m) below land-surface datum, May 28, 1925; lowest water level, 61.88 ft (18.861 m) below land-surface datum, Oct. 10, 1970.

EXTREMES FOR CURRENT YEAR.--Highest water level, 43.97 ft (13.402 m) below land-surface datum, between Mar. 8 and June 5; lowest water level, 54.40 ft (16.581 m) below land-surface datum, between Aug. 8 and Nov. 27, 1978.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	WATER LEVEL	DATE	WATER LEVEL
MAY 31	44.85	AUG 8	53.05

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 10	53.95	FEB 16	49.19	MAY 23	47.88	AUG 8	51.29

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 27	50.94	MAR 8	48.54	JUN 5	44.12	AUG 7	48.52

ATLANTIC COUNTY

392153074250101. Local I.D., Galen Hall Obs. Unique Well Number, 01-0037.
LOCATION.--Lat 39°21'51", long 74°24'59", Hydrologic Unit 02040302, near the intersection of Pacific and Congress Avenues, Atlantic City.
Owner: Atlantic City Water Department.
AQUIFER.--Lower ("800-foot") sand in Kirkwood Formation of Miocene Age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in (152 mm), depth 837 ft (255.1 m), screened 782 to 837 ft (238.4 to 255.1 m).
INSTRUMENTATION.--Water-level extremes recorder. January 1949 to August 1975, water-level recorder.
DATUM.--Land-surface datum is 9.5 ft (2.90 m) National Geodetic Vertical Datum of 1929.
Measuring point: Front edge of cutout in recorder housing, 0.90 ft (0.274 m) above land-surface datum.
PERIOD OF RECORD.--January 1949 to August 1975, May 1977 to current year. Records for 1949 to 1975 are unpublished and are available in files of New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 52.58 ft (16.026 m) below land-surface datum, Mar. 7, 1962; lowest water level, 96.96 ft (29.553 m) below land-surface datum, Sept. 23, 1970.
EXTREMES FOR CURRENT YEAR.--Highest water level, 61.95 ft (18.882 m) below land-surface datum, between Mar. 16 and June 5; lowest water level, 81.28 ft (24.774 m) below land-surface datum, between Aug. 7 and Sept. 5.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	WATER LEVEL	DATE	WATER LEVEL
MAY 11	65.54	AUG 11	86.17

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 10	72.79	FEB 21	62.77	MAY 15	65.63	AUG 8	80.20

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 28	74.53	MAR 16	67.48	JUN 5	66.62	AUG 7	78.49	SEP 5	81.15	SEP 15	80.19

ATLANTIC COUNTY

393333074442401. Local I.D., Scholler Obs. 1. Unique Well Number, 01-0256.
LOCATION.--Lat 39°33'33", long 75°44'26", Hydrologic Unit 02040302, about 1.5 mi (2.4 km) southeast of Route 30 at Elwood.
Owner: Scholler Brothers Chemical Company.
AQUIFER.--Kirkwood Formation of Miocene Age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 8 in (203 mm), depth 275 ft (83.8 m), screened 254 to 275 ft (77.4 to 83.8 m).
INSTRUMENTATION.--Water-level extremes recorder. April 1962 to August 1975, water-level recorder.
DATUM.--Land-surface datum is 93.2 ft (28.41 m) National Geodetic Vertical Datum of 1929.
Measuring point: Front edge of cutout in recorder housing, 2.95 ft (0.899 m) above land-surface datum.
PERIOD OF RECORD.--April 1962 to August 1975, May 1977 to current year. Records for 1962 to 1975 are unpublished and are available in files of New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 27.18 ft (8.284 m) below land-surface datum, Mar. 20, 1963; lowest water level, 39.56 ft (12.058 m) below land-surface datum, Sept. 13, 1966.
EXTREMES FOR CURRENT YEAR.--Highest water level, 34.29 ft (10.452 m) below land-surface datum, between Mar. 8 and June 5; lowest water level, 36.78 ft (11.211 m) below land-surface datum, between Aug. 4 and Nov. 27, 1978.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	WATER LEVEL	DATE	WATER LEVEL
MAY 31	37.48	AUG 8	38.77

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 10	38.05	FEB 16	35.78	MAY 23	35.39	AUG 4	35.47

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 27	36.73	MAR 8	34.48	JUN 5	34.43	SEP 11	35.72

BURLINGTON COUNTY

395122074301701. Local I.D., Butler Place 1 Obs. Unique Well Number, 05-0683.
LOCATION.--Lat 39°51'22", long 74°30'17", Hydrologic Unit 02040301, in Lebanon State Forest, Woodland Township.
Owner: U.S. Geological Survey.
AQUIFER.--Potomac-Raritan-Magothy Aquifer system of Cretaceous Age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter top 8 in (203 mm), diameter bottom 6 in (152 mm), depth 2,117 ft (645.3 m), screened 2,102 to 2,117 ft (640.7 to 645.3 m).
INSTRUMENTATION.--Water-level recorder.
DATUM.--Land-surface datum is 140.7 ft (42.88 m) National Geodetic Vertical Datum of 1929.
Measuring point: Top of 8 in (203 mm) coupling, 2.8 ft (0.85 m) above land-surface datum.
PERIOD OF RECORD.--October 1964 to August 1975, March 1977 to current year. Records for 1964 to 1977 are unpublished and are available in files of New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 143.20 ft (43.647 m) below land-surface datum, Feb. 25, 1965; lowest water level, 171.35 ft (52.227 m) below land-surface datum, Sept. 24-25, 27-28, 1979.
EXTREMES FOR CURRENT YEAR.--Highest water level, 169.58 ft (51.688 m) below land-surface datum, Jan. 21; lowest water level, 171.35 ft (52.227 m) below land-surface datum, Sept. 24-25, 27-28.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	170.86	170.85	170.50	170.76	170.28	170.53	170.40	170.46	170.34	170.76	170.94	171.09
10	170.98	170.95	170.63	170.55	170.46	170.34	170.40	170.52	170.53	170.90	170.98	171.12
15	170.84	170.97	170.60	170.47	170.43	170.43	170.33	170.49	170.71	170.84	170.97	171.10
20	170.84	171.05	170.49	170.35	170.58	170.43	170.59	170.43	170.81	170.94	171.03	171.29
25	170.94	170.70	170.18	169.74	170.29	170.14	170.61	170.16	170.77	170.90	171.06	171.34
EOM	171.06	170.66	170.75	170.05	170.35	170.54	170.51	170.53	170.74	170.94	171.06	171.26
MEAN	170.90	170.90	170.60	170.29	170.40	170.43	170.51	170.47	170.62	170.86	171.01	171.16

WTR YR 1979 MEAN 170.68 HIGH 169.74 JAN 21 AND OTHERS LOW 171.35 SEP 27

BURLINGTON COUNTY

394106074362501. Local I.D., Mount at Mount Obs. Unique Well Number, 05-0570.
LOCATION.--Lat 39°41'06", long 74°36'23", Hydrologic Unit 02040301, at Mount in Wharton State Forest.
Owner: U.S. Geological Survey.
AQUIFER.--Pleistocene-Cohansey Sand undifferentiated.
WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 8 in (203 mm), depth 25 ft (7.6 m), open-end cement casing.
INSTRUMENTATION.--Water-level recorder.
DATUM.--Land-surface datum is 63.2 ft (19.26 m) National Geodetic Vertical Datum of 1929.
Measuring point: Top of cement casing, 0.6 ft (0.18 m) above land-surface datum.
PERIOD OF RECORD--September 1955 to July 1970, October 1977 to current year. Records for 1955 to 1970 are unpublished and are available in files of New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 2.92 ft (0.890 m) below land-surface datum, Aug. 26, 1958; lowest water level, 18.51 ft (5.642 m) below land-surface datum, Oct. 2, 1966.
EXTREMES FOR CURRENT YEAR.--Highest water level, 3.98 ft (1.213 m) below land-surface datum, May 21; lowest water level, 12.95 ft (3.947 m) below land-surface datum, Dec. 23-24.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	10.82	11.89	12.73	12.42	8.79		6.10	6.55	4.25	6.96	8.59	9.46
10	11.02	12.06	12.86	12.16	8.92		6.37	6.76	4.82	7.26	8.80	9.34
15	11.18	12.20	12.91	11.73	---		6.09	6.33	5.44	7.58	9.00	9.32
20	11.36	12.36	12.89	11.43	---		6.16	4.27	5.86	7.88	9.14	9.52
25	11.53	12.47	12.85	10.45	---		6.43	4.25	6.26	8.09	9.27	9.59
EOM	11.74	12.60	12.67	9.02	---		6.42	4.70	6.52	8.37	9.40	9.45
MEAN	11.22	12.20	12.84	11.38	8.84		6.25	5.66	5.41	7.59	8.99	9.44

WTR YR 1979 MEAN 9.12 HIGH 4.01 MAY 21 LOW 12.94 DEC 23

CAMDEN COUNTY

394215074561702. Local I.D., New Brooklyn Park 2 Obs. Unique Well Number, 07-0477.
LOCATION.--Lat 39°42'15", long 74°56'17", Hydrologic Unit 02040302, on eastern shore of New Brooklyn Lake approximately 900 ft (270 m) upstream of Route 536, Winslow Township.
Owner: U.S. Geological Survey.
AQUIFER.--Potomac-Raritan-Magothy Aquifer system of Cretaceous Age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in (152 mm), depth 848 ft (258.5 m), screened 830 to 848 ft (253.0 to 258.5 m).
INSTRUMENTATION.--Water-level recorder.
DATUM.--Land-surface datum is 111.1 ft (33.86 m) National Geodetic Vertical Datum of 1929.
Measuring point: Top edge of recorder shelf, 3.3 ft (1.01 m) above land-surface datum.
PERIOD OF RECORD.--January 1963 to August 1975, March 1977 to current year. Records for 1963 to 1975 are unpublished and are available in files of New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 131.54 ft (40.093 m) below land-surface datum, Mar. 6, 1963; lowest water level, 179.16 ft (54.608 m) below land-surface datum, July 28, 1977.
EXTREMES FOR CURRENT YEAR.--Highest water level, 172.03 ft (52.435 m) below land-surface datum, Jan. 21; lowest water level, 179.13 ft (54.599 m) below land-surface datum, Aug. 13.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	176.03	175.05	174.08	173.38	172.82	173.25		173.76	174.60	176.86	178.81	178.03
10	175.87	175.07	174.00	173.10	172.96	173.17		174.30	174.93	177.33	178.96	177.84
15	175.64	174.99	173.84	172.94	172.87	---		174.92	175.42	178.26	179.02	177.83
20	175.43	174.93	173.65	172.69	173.04	---		174.77	175.91	178.74	178.75	178.05
25	175.35	174.55	173.28	172.15	172.97	---		174.53	176.26	178.52	178.56	177.92
EOM	175.29	174.35	173.52	172.58	173.11	---		174.83	176.39	178.54	178.23	177.71
MEAN	175.64	174.90	173.84	172.81	172.93	173.19		174.51	175.47	177.90	178.74	177.90

WTR YR 1979 MEAN 175.38 HIGH 172.15 Jan 21 AND OTHERS LOW 179.12 AUG 13

CAMDEN COUNTY

394215074561703. Local I.D., New Brooklyn Park 3 Obs. Unique Well Number, 07-0478.
LOCATION.--Lat 39°42'15", long 74°56'17", Hydrologic Unit 02040302, on eastern shore of New Brooklyn Lake approximately 900 ft (270 m) upstream of Route 536, Winslow Township.
Owner: U.S. Geological Survey.
AQUIFER.--Mount Laurel-Wenonah undifferentiated of Cretaceous Age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in (152 mm), depth 530 ft (162 m), screened 520 to 530 ft (158 to 162 m).
INSTRUMENTATION.--Water-level recorder.
DATUM.--Land-surface datum is 111.4 ft (33.95 m) National Geodetic Vertical Datum of 1929.
Measuring point: Top of 6 inch coupling, 2.1 ft (0.64 m) above land-surface datum.
PERIOD OF RECORD.--December 1962 to Aaugust 1975, March 1977 to current year. Records for 1962 to 1975 are unpublished and are available in files of New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 58.53 ft (17.840 m) below land-surface datum, Dec. 18, 1962; lowest water level, 76.49 ft (23.314 m) below land-surface datum, May 17-18, 1979.
EXTREMES FOR CURRENT YEAR.--Highest water level, 74.60 ft (22.738 m) below land-surface datum, Jan. 21; lowest water level, 76.49 ft (23.314 m) below land-surface datum, May 17-18.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	75.11	75.24	75.00	75.31	75.26	75.58		76.33	76.12	75.98	75.69	75.52
10	75.23	75.33	75.08	75.17	75.40	75.54		76.42	76.21	76.03	75.69	75.51
15	75.13	75.36	75.18	75.17	75.40	---		76.37	76.23	75.94	75.58	75.42
20	75.13	75.40	75.14	75.20	75.53	---		76.29	76.22	75.88	75.58	75.55
25	75.23	75.18	74.88	74.72	75.28	---		76.07	76.12	75.80	75.59	75.51
EOM	75.37	75.15	75.34	75.06	75.30	---		76.31	76.03	75.76	75.45	75.41
MEAN	75.18	75.30	75.15	75.07	75.36	75.52		76.33	76.16	75.91	75.62	75.48

WTR YR 1979 MEAN 75.55 HIGH 74.72 JAN 25 LOW 76.47 May 17

CAMDEN COUNTY

394215074561704. Local I.D., New Brooklyn Park 4 Obs. Unique Well Number, 07-0479.
LOCATION.--Lat 39°42'15", long 74°56'17", Hydrologic Unit 02040302, on eastern shore of New Brooklyn Lake approximately 900 ft (270 m) upstream of Route 536, Winslow Township.
Owner: U.S. Geological Survey.
AQUIFER.--Kirkwood Formation of Miocene Age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in (152 mm), depth 210 ft (64.0 m), screened 200 to 210 ft (61.0 to 64.0 m).
INSTRUMENTATION.--Water-level recorder.
DATUM.--Land-surface datum is 111.2 ft (33.89 m) National Geodetic Vertical Datum of 1929.
Measuring point: Top of 6 inch coupling, 2.3 ft (0.70 m) above land-surface datum.
PERIOD OF RECORD.--December 1962 to August 1975, March 1977 to current year. Records for 1962 to 1975 are unpublished and are available in files of New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.41 ft (0.125 m) below land-surface datum, Feb. 27, 1979; lowest water level, 2.28 ft (0.695 m) below land-surface datum, Aug. 31, 1966.
EXTREMES FOR CURRENT YEAR.--Highest water level, 0.41 ft (0.125 m) below land-surface datum, Feb. 27; lowest water level, 1.32 ft (0.402 m) below land-surface datum, Nov. 16-17.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	1.23	1.27	1.10	1.03	.94	.76	.81	.77	.64	.78	.84	.84
10	1.27	1.28	1.04	.94	.97	.67	.79	.82	.68	.86	.91	.74
15	1.25	1.31	1.10	.95	.98	.75	.78	.73	.65	.86	.78	.82
20	1.25	1.29	1.13	1.04	.96	.85	.84	.68	.70	.85	.84	.87
25	1.27	1.25	1.06	.64	.77	.77	.90	.58	.73	.84	.88	.78
EOM	1.31	1.20	1.14	.79	.45	.84	.77	.64	.79	.86	.75	.80
MEAN	1.26	1.28	1.10	.90	.89	.76	.82	.71	.69	.84	.85	.80

WTR YR 1979 MEAN .91 HIGH .42 FEB 27 LOW 1.32 NOV 17

CAMDEN COUNTY

394332075000301. Local I.D., Winslow WC 4-71 Obs. Unique Well Number, 07-0498.
LOCATION.--Lat 39°43'32", long 75°00'03", Hydrologic Unit 02040302, on north side of Wilby Road, approximately 0.6 mi (1.0 km) southwest of intersection with Turnersville-Sicklerville Road, Winslow Township.
Owner: Winslow Water Company.
AQUIFER.--Cohansey Sand of Miocene (?) and Pliocene (?) Age.
WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 6 in (152 mm), depth 76 ft (23.2 m), screened 71 to 76 ft (21.6 to 23.2 m).
INSTRUMENTATION.--Water-level recorder.
DATUM.--Land-surface datum is 144.2 ft (43.95 m) National Geodetic Vertical Datum of 1929.
Measuring point: Top edge of recorder shelf, 1.0 ft (0.30 m) above land-surface datum.
PERIOD OF RECORD.--December 1972 to September 1979. Records for 1972 to 1977 are unpublished and are available in files of New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 4.39 ft (1.338 m) below land-surface datum, Apr. 10, 1973; lowest water level, 11.25 ft (3.429 m) below land-surface datum, Aug. 24, 1977.
EXTREMES FOR CURRENT YEAR.--Highest water level, 6.25 ft (1.905 m) below land-surface datum, May 26; lowest water level, 9.05 ft (2.758 m) below land-surface datum, Nov. 26-27.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5		---	8.78			---	6.57	6.73	6.36	6.92	7.47	7.65
10		---	8.69			---	6.61	6.82	6.51	7.04	7.59	7.62
15		---	8.75			6.47	6.51	6.85	6.47	7.15	7.59	7.75
20		8.97	---			6.52	6.67	6.65	6.64	7.18	7.68	7.86
25		9.01	---			6.41	6.72	6.32	6.70	7.27	7.76	7.85
EOM		8.87	---			6.56	6.65	6.41	6.80	7.40	7.47	7.81
MEAN		8.96	8.80			6.51	6.62	6.66	6.54	7.13	7.59	7.73

WTR YR 1979 MEAN 7.27 HIGH 6.27 MAY 26 LOW 9.03 NOV 26

CUMBERLAND COUNTY

392512074521206. Local I.D., Ragovin 2100. Unique Well Number 11-0137.
LOCATION.--Lat 39°25'12", long 74°52'12", Hydrologic Unit 02040302, in wooded area off Harriet Avenue, 1.5 mi (2.4 km) southwest of Milmay.
Owner: DeRosa (Formerly: W.H. Ragovin).
AQUIFER.--Potomac-Raritan-Magothy Aquifer system of Cretaceous Age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 5 in (127 mm), depth 2,093 ft (637.9 m), screened 2,083 to 2,093 ft (634.9 to 637.9 m).
INSTRUMENTATION.--Water-level recorder.
DATUM.--Land-surface datum is 91 ft (27.7 m) National Geodetic Vertical Datum of 1929.
Measuring point: Top edge of recorder shelf, 2.4 ft (0.73 m) above land-surface datum.
PERIOD OF RECORD.--October 1974 to April 1975, February 1977 to current year. Records for 1974 to 1977 are unpublished and are available in files of New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 115.82 ft (35.302 m) below land-surface datum, Apr. 3, 1975; lowest water level, 123.38 ft (37.606 m) below land-surface datum, Sept. 17, 20, 1979.
EXTREMES FOR CURRENT YEAR.--Highest water level, 121.63 ft (37.073 m) below land-surface datum, Jan. 21; lowest water level, 123.38 ft (37.606 m) below land-surface datum, Sept. 17, 20.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	122.12	122.24	122.14	122.52	122.21	122.22	122.20	122.42	122.40	122.76	122.96	123.17
10	122.26	122.37	122.32	122.39	122.33	122.10	122.24	122.50	122.56	122.88	123.00	123.21
15	122.16	122.39	122.31	122.40	122.25	122.25	122.19	122.57	122.73	122.87	123.01	123.20
20	122.14	122.52	122.23	122.16	122.36	122.20	122.45	122.56	122.78	122.99	123.06	123.34
25	122.23	122.29	122.02	121.80	122.05	121.99	122.49	122.33	122.75	122.97	123.11	123.32
EOM	122.38	122.26	122.48	122.00	122.15	122.29	122.42	122.63	122.71	123.00	123.12	123.24
MEAN	122.20	122.36	122.30	122.18	122.24	122.21	122.34	122.52	122.63	122.89	123.04	123.21

WTR YR 1979 MEAN 122.51 HIGH 121.72 JAN 21 LOW 123.35 SEP 17

ESSEX COUNTY

404452074211601. Local I.D., Canoe Brook 30 Obs. Unique Well Number, 13-0013.
LOCATION.--Lat 40°44'52", long 74°21'16", Hydrologic Unit 02030103, about 0.3 mi (0.5 km) north of Canoe Brook pumping station, near Chatham.
Owner: Commonwealth Water Company.
AQUIFER.--Stratified drift of Pleistocene Age.
WELL CHARACTERISTICS.--Drilled semi-artesian observation well, diameter 10 in (254 mm), depth 130 ft (39.6 m).
INSTRUMENTATION.--Water-level recorder.
DATUM.--Land-surface datum is 170 ft (51.8 m) National Geodetic Vertical Datum of 1929.
Measuring point: Top edge of recorder shelf, 6.6 ft (2.01 m) above land-surface datum.
REMARKS.--Water levels in this well are occasionally affected by pumpage.
PERIOD OF RECORD.--1925 to May 1975, April 1977 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 7.25 ft (2.210 m) below land-surface datum, Aug. 25, 1931; lowest water level, 86.70 ft (26.426 m) below land-surface datum, Oct. 23, 1977.
EXTREMES FOR CURRENT YEAR.--Highest water level, 72.24 ft (22.019 m) below land-surface datum, June 29; lowest water level, 83.13 ft (25.338 m) below land-surfacce datum, Dec. 30-31.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	82.11	81.21	81.05	82.53	---	76.30	79.16	77.14	77.73	77.46	78.26	76.15
10	82.62	82.30	80.66	82.12	---	74.58	79.19	78.73	76.96	77.44	78.18	---
15	78.72	82.22	80.71	80.25	---	77.16	78.16	76.33	77.80	78.06	77.03	---
20	81.63	81.13	81.80	77.25	---	---	78.23	77.62	78.45	78.49	76.86	---
25	80.66	80.46	81.71	74.12	77.52	---	78.78	77.77	77.53	78.32	76.46	75.09
EOM	80.36	80.53	83.05	---	77.04	78.70	76.76	78.42	75.67	78.19	77.00	---
MEAN	81.24	81.28	81.52	79.65	77.23	77.04	78.60	77.56	77.48	77.83	77.43	75.69

WTR YR 1979 MEAN 78.83 HIGH 73.75 MAR 11 LOW 83.08 DEC 30

MERCER COUNTY

402131074461201. Local I.D., Honey Branch 10 Obs. Unique Well Number, 21-0088.
LOCATION.--Lat 40°21'28", Long 74°46'13", Hydrologic Unit 02030105, on the lands of Stony Brook-Millstone Watershed Association, near Pennington.
Owner: Stony Brook-Millstone Watershed Association.
AQUIFER.--Brunswick Shale of Triassic Age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in (152 mm), cased to approximately 20 ft (6.1 m), depth 150 ft (45.7 m), open hole.
INSTRUMENTATION.--Water-level recorder.
DATUM.--Land-surface datum is 179.5 ft (54.71 m) National Geodetic Vertical Datum of 1929.
Measuring point: Top edge of recorder shelf, 4.0 ft (1.22 m) above land-surface datum.
PERIOD OF RECORD.--June 1967 to August 1975, April 1977 to current year. Records for 1967 to 1975 are unpublished and are available in files of New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 24.63 ft (7.507 m) below land-surface datum, July 21, 1967; lowest water level, 27.72 ft (8.449 m) below land-surface datum, Oct. 5, 1968.
EXTREMES FOR CURRENT YEAR.--Highest water level, 25.12 ft (7.657 m) below land-surface datum, Jan. 24; lowest water level, 27.00 ft (8.230 m) below land-surface datum, Nov. 16-17.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	26.12	26.76	25.83	25.84	26.02	25.71	25.75	26.05	25.72	26.45	25.68	26.04
10	26.28	26.88	25.71	25.78	26.24	25.73	25.75	26.41	25.91	26.74	25.79	25.65
15	26.40	26.92	25.82	25.91	26.39	25.88	25.62	26.22	25.81	26.82	25.60	25.74
20	26.53	26.73	25.87	26.01	26.56	25.90	25.89	25.93	26.11	26.56	25.69	25.98
25	26.64	26.51	25.56	25.47	25.53	25.76	26.03	25.41	26.38	26.53	25.62	25.63
EOM	26.67	26.13	25.88	25.78	25.77	25.86	25.90	25.76	26.36	26.15	25.76	25.32
MEAN	26.41	26.71	25.84	25.75	26.14	25.81	25.84	26.00	26.00	26.60	25.71	25.73

WTR YR 1979 MEAN 26.05 HIGH 25.32 SEP 30 LOW 26.94 NOV 16

MIDDLESEX COUNTY

402450074181801. Local I.D., Browntown Obs. Unique Well Number, 23-0182.
LOCATION.--Lat 40°24'49", long 74°18'19", Hydrologic Unit 02030105, on the east side of Route 9 about 1.0 mi (1.6 km) north of Browntown.
Owner: Clyde Bowne.
AQUIFER.--Old Bridge Sand Member of the Magothy Formation of Cretaceous Age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in (152 mm), depth 71 ft (21.6 m), perforated pipe 66 to 71 ft (20.1 to 21.6 m).
INSTRUMENTATION.--Water-level extremes recorder. November 1932 to August 1975, water-level recorder.
DATUM.--Land-surface datum is 30.6 ft (9.33 m) National Geodetic Vertical Datum of 1929.
Measuring point: Front edge of cutout in recorder housing 3.17 ft (0.966 m) above land-surface datum.
PERIOD OF RECORD.--November 1932 to August 1975, January 1977 to current year. Records for 1932 to 1975 are unpublished and are available in files of New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 2.44 ft (0.744 m) below land-surface datum, Apr. 9, 10, 1939; lowest water level, 14.75 ft (4.496 m) below land-surface datum, between Aug. 4, and Nov. 2, 1977.
EXTREMES FOR CURRENT YEAR.--Highest water level, 10.83 ft (3.301 m) below land-surface datum, between Mar. 20 and June 26; lowest water level, 13.67 ft (4.167 m) below land-surface datum, between Nov. 20 and Jan. 9.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 27	13.78	MAY 6	13.54	AUG 4	14.58

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 2	14.42	FEB 13	10.73	MAY 19	10.57	AUG 1	12.09

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 20	13.59	JAN 9	13.22	MAR 20	10.93	JUN 26	11.43	AUG 16	12.30	SEP 20	12.48

MIDDLESEX COUNTY

402553074271701. Local I.D., Robert Fischer Obs. Unique Well Number, 23-0070.
LOCATION.--Lat 40°25'55", long 74°27'19", Hydrologic Unit 02030105, about 1,800 ft (548.6 m) southeast of Weber School on Hardenburg Lane, East Brunswick Township.
Owner: Robert D. Fischer.
AQUIFER.--Farrington Sand Member of the Raritan Formation of Cretaceous Age.
WELL CHARACTERISTICS.--Dug water-table observation well, diameter 4.5 ft (1.37 m), depth 21 ft (6.4 m), well is cased to 17 ft (5.2 m).
INSTRUMENTATION.--Water-level extremes recorder. June 1936 to December 1974, water-level recorder.
DATUM.--Land-surface datum is 73.0 ft (22.2 m) National Geodetic Vertical Datum of 1929.
Measuring point: Top of angle iron at bottom of shelter doors 1.70 ft (0.518 m) above land-surface datum.
REMARKS.--Well deepened Oct. 29, 1965 from 17 to 21 ft (5.18 to 6.40 m).
PERIOD OF RECORD.--June 1936 to December 1974, January 1977 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 8.88 ft (2.707 m) below land-surface datum, Apr. 26, 27, 1939; lowest water level, 18.36 ft (5.596 m) below land-surface datum, Feb. 11, 1966, well was dry many times, 1963-1965 before deepening.
EXTREMES FOR CURRENT YEAR.--Highest water level, 12.40 ft (3.800 m) below land-surface datum, between Mar. 22 and June 25; lowest water level, 16.47 ft (5.020 m) below land-surface datum, between Nov. 20 and Mar. 22.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 27	17.57	MAY 4	15.61	AUG 4	16.74

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 2	17.45	FEB 13	13.20	MAY 18	13.39	AUG 1	13.98

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 20	16.13	MAR 22	12.59	JUN 25	12.67	AUG 24	14.04

MIDDLESEX COUNTY

402109074301301. Local I.D., Forsgate Obs. 1-1961. Unique Well Number, 23-0291.
LOCATION.--Lat 40°21'09", long 74°30'13", Hydrologic Unit 02030105, about 0.4 mi (0.6 km) west of Route 130 on Friendship Road, South Brunswick Township.
Owner: Monroe Township Municipal Utilities Authority.
AQUIFER.--Farrington Sand Member of the Raritan Formation of Cretaceous Age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in (152 mm), depth 203 ft (61.9 m), screened 192 to 203 ft (58.5 to 61.9 m).
INSTRUMENTATION.--Water-level extremes recorder. October 1961 to August 1975, water-level recorder.
DATUM.--Land-surface datum is 106.8 ft (32.55 m) National Geodetic Vertical Datum of 1929.
Measuring point: Front edge of cutout in recorder housing 2.06 ft (0.628 m) above land-surface datum.
PERIOD OF RECORD.--October 1961 to August 1975, January 1977 to current year. Records for 1961 to 1975 are unpublished and are available in files of New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 24.70 ft (7.529 m) below land-surface datum, July 5, 1973; lowest water level, 37.39 ft (11.396 m) below land-surface datum, between Nov. 1, 1977 and Feb. 13, 1978.
EXTREMES FOR CURRENT YEAR.--Highest water level, 31.42 ft (9.577 m) below land-surface datum, between June 25 and Aug. 24; lowest water level, 35.18 ft (10.723 m) below land-surface datum, between Mar. 29 and June 25.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 26	33.24	MAY 4	34.64	AUG 4	36.59

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 1	37.37	FEB 13	34.11	MAY 18	32.86	AUG 1	33.43

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 20	34.24	MAR 29	31.93	JUN 25	31.66	AUG 24	31.61

MIDDLESEX COUNTY

402015074275701. Local I.D., Forsgate Obs. 3-1961. Unique Well Number, 23-0228.
LOCATION.--Lat 40°20'15", long 74°27'57", Hydrologic Unit 02030105, on Hanover Lane at Rossmoor, Monroe Township.
Owner: Monroe Township Municipal Utilities Authority.
AQUIFER.--Old Bridge Sand Member of the Magothy Formation of Cretaceous Age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in (152 mm), depth 138 ft (42.1 m), screened 128 to 138 ft (39.0 to 42.1 m).
INSTRUMENTATION.--Water-level extremes recorder. October 1961 to August 1967, August 1968 to August 1975, water-level recorder.
DATUM.--Land-surface datum is 147.3 ft (44.90 m) National Geodetic Vertical Datum of 1929.
Measuring point: Front edge of cutout in recorder housing 1.40 ft (0.427 m) below land-surface datum.
PERIOD OF RECORD.--October 1961 to August 1967, August 1968 to August 1975, January 1977 to current year.
Records for 1961 to 1975 are unpublished and are available in files of New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 70.32 ft (21.434 m) below land-surface datum, May 6, 1962; lowest water level, 84.85 ft (25.862 m) below land-surface datum, between Aug. 5 and Nov. 1, 1977.
EXTREMES FOR CURRENT YEAR.--Highest water level, 79.16 ft (24.128 m) below land-surface datum, between Mar. 21 and June 25; lowest water level, 82.01 ft (24.997 m) below land-surface datum, between Aug. 1 and Nov. 20, 1978.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 26	79.60	MAY 4	82.02	AUG 5	83.97

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 1	84.48	FEB 15	82.87	MAY 18	80.85	AUG 1	81.48

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 20	81.30	MAR 21	80.37	JUN 25	79.40	AUG 23	79.74

MIDDLESEX COUNTY

402015074275702. Local I.D., Forsgate Obs. 4-1961. Unique Well Number, 23-0229.
LOCATION.--Lat 40°20'15", long 74°27'57", Hydrologic Unit 02030105, on Hanover Lane at Rossmoor, Monroe Township.
Owner: Monroe Township Municipal Utilities Authority.
AQUIFER.--Farrington Sand Member of the Raritan Formation of Cretaceous Age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in (152 mm), depth 330 ft (100.6 m), screened 319 to 330 ft (97.2 to 100.6 m).
INSTRUMENTATION.--Water-level extremes recorder. April 1965 to August 1967, August 1968 to August 1975, water-level recorder.
DATUM.--Land-surface datum is 147.3 ft (44.90 m) National Geodetic Vertical Datum of 1929.
Measuring point: Front edge of cutout in recorder housing 1.50 ft (0.457 m) below land-surface datum.
PERIOD OF RECORD.--April 1965 to August 1967, August 1968 to August 1975, January 1977 to current year. Records for 1965 to 1975 are unpublished and are available in files of New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 80.09 ft (24.411 m) below land-surface datum, July 16, 1973; lowest water level, 93.24 ft (28.420 m) below land-surface datum, between Nov. 20, 1978 and Mar. 21, 1979.
EXTREMES FOR CURRENT YEAR.--Highest water level, 86.98 ft (26.512 m) below land-surface datum, between June 25 and Aug. 23; lowest water level, 93.24 ft (28.420 m) below land-surface datum, between Nov. 20 and Mar. 21.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 26	86.95	MAY 4	89.36	AUG 5	91.41

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 1	91.61	FEB 15	89.10	MAY 18	87.94	AUG 1	89.20

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 20	88.96	MAR 21	87.69	JUN 25	87.17	AUG 23	87.98

MIDDLESEX COUNTY

402746074314501. Local I.D., Morgan 1 Obs. Unique Well Number, 23-0404.
LOCATION.--Lat 40°27'45", long 74°16'45", Hydrologic Unit 02030104, on north side of Ernston Road about 600 ft (183 m) east of the Garden State Parkway, Sayreville.
Owner: Sayreville Water Department.
AQUIFER.--Farrington Sand Member of the Raritan Formation of Cretaceous Age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in (152 mm), depth 248 ft (75.6 m), screened 238 to 248 ft (72.5 to 75.6 m).
INSTRUMENTATION.--Water-level recorder.
DATUM.--Land-surface datum is 23.4 ft (7.13 m) National Geodetic Vertical Datum of 1929.
Measuring point: Top edge of recorder shelf, 3.0 ft (0.91 m) above land-surface datum.
REMARKS.--Water levels in this well are affected by pumpage.
PERIOD OF RECORD.--November 1973 to July 1975, March 1977 to current year. Records for 1973 to 1977 are unpublished and are available in files of New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 67.11 ft (20.455 m) below land-surface datum, Mar. 29, 1974; lowest water level, 110.08 ft (33.552 m) below land-surface datum, July 21, 1979.
EXTREMES FOR CURRENT YEAR.--Highest water level, 84.81 ft (25.850 m) below land-surface datum, Nov. 15; lowest water Level, 110.08 ft (33.552 m) below land-surface datum, July 21.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	101.53	99.48	99.55	98.34	96.57	---	101.74	98.06	106.64	107.23		---
10	102.94	99.08	99.49	97.99	96.13	---	98.76	99.07	106.89	107.38		---
15	100.87	90.09	99.70	97.63	96.40	88.74	97.64	98.55	106.88	107.96		104.54
20	99.06	99.86	99.80	97.40	97.29	98.51	97.64	104.91	107.18	109.89		103.47
25	99.57	99.26	99.07	96.42	---	99.53	98.24	105.49	107.42	---		102.55
EOM	99.90	99.48	98.33	96.32	---	100.91	98.12	105.42	107.64	---		102.09
MEAN	100.74	98.70	99.51	97.40	96.49	96.79	98.99	101.53	106.96	107.89		103.18

WTR YR 1979 MEAN 100.72 HIGH 87.20 MAR 14 LOW 110.00 JUL 21

MIDDLESEX COUNTY

402633074220001. Local I.D., South River 2 Obs. Unique Well Number, 23-0439.

LOCATION.--Lat 40°26'33", long 74°22'00", Hydrologic Unit 02030105, at the corner of Whitehead Avenue and Anne Street, South River.

Owner: South River Borough Water Department.

AQUIFER.--Farrington Sand Member of the Raritan Formation of Cretaceous Age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in (152 mm), depth 126 ft (38.4 m), screened 121 to 126 ft (36.9 to 38.4 m).

INSTRUMENTATION.--Water-level extremes recorder. January 1968 to August 1975, water-level recorder.

DATUM.--Land-surface datum is 20.7 ft (6.31 m) National Geodetic Vertical Datum of 1929.

Measuring point: Front edge of cutout in recorder housing 2.55 ft (0.777 m) above land-surface datum.

PERIOD OF RECORD.--January 1968 to August 1975, January 1977 to current year. Records for 1968 to 1975 are unpublished and are available in files of New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 39.37 ft (12.000 m) below land-surface datum, Jan. 30, 1968; lowest water level, 69.13 ft (21.071 m) below land-surface datum, between Mar. 20 and June 27, 1979.

EXTREMES FOR CURRENT YEAR.--Highest water level, 56.78 ft (17.307 m) below land-surface datum, between Nov. 20 and Mar. 20; lowest water level, 69.13 ft (21.071 m) below land-surface datum, between Mar. 20 and June 27.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 28	58.62	MAR 22	58.16	MAY 6	53.46	JUN 24	64.04	JUL 27	65.44	AUG 31	66.68

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 30	60.18	JAN 4	58.65	MAR 13	60.27	JUN 6	55.85	JUL 7	58.53

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 20	61.14	MAR 20	62.68	JUN 27	68.79	JUL 20	67.37	AUG 16	62.62

MONMOUTH COUNTY

400832074082101. Local I.D., Allaire State Park C Obs. Unique Well Number, 25-0429.
LOCATION.--Lat 40°08'34", long 74°08'34", Hydrologic Unit 02040301, approximately 1.3 mi (2.1 km) southeast of Lower Squankum, in Allaire State Park, Wall Township.
Owner: U.S. Geological Survey.
AQUIFER.--Englishtown Sand of Cretaceous Age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in (152 mm), depth 715 ft (217.9 m), screened 623 to 633 ft (189.9 to 192.9 m).
INSTRUMENTATION.--Water-level extremes recorder. January 1964 to July 1975, water-level recorder.
DATUM.--Land-surface datum is 97.9 ft (29.84 m) National Geodetic Vertical Datum of 1929.
Measuring point: Front edge of cutout in recorder housing,1.64 ft (0.500 m) above land-surface datum.
PERIOD OF RECORD.--January 1964 to July 1975, February 1977 to current year. Records for 1964 to 1975 are unpublished and are available in files of New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 141.05 ft (42.992 m) below land-surface datum, Apr. 8, 1964; lowest water level, 243.82 ft (74.316 m) below land-surface datum, between Aug. 3 and Nov. 3, 1977.
EXTREMES FOR CURRENT YEAR.--Highest water level, 229.65 ft (69.997 m) below land-surface datum, between Mar. 13 and May 21; lowest water level, 243.28 ft (74.152 m) below land-surface datum, between Aug. 3 and Nov. 3, 1978.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
FEB 7	226.33	MAY 9	225.66	AUG 3	243.15

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 3	239.58	DEC 30	233.11	JAN 5	232.60	JAN 31	230.23	MAY 19	228.67	AUG 3	239.66

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 3	241.24	MAR 13	232.76	MAY 21	229.83	AUG 9	236.01

MONMOUTH COUNTY

402626074114204. Local I.D., Keyport Boro WD 4. Unique Well Number, 25-0206.
LOCATION.--Lat 40°26'26", long 74°11'42", Hydrologic Unit 02030104, at the unused Myrtle Avenue Water Plant, Keyport.
Owner: Keyport Borough Water Department.
AQUIFER.--Old Bridge Sand Member of the Magothy Formation of Cretaceous Age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 8 in (203 mm), depth 289 ft (88.1 m), screened 229 to 289 ft (69.8 to 88.1 m).
INSTRUMENTATION.--Water-level recorder.
DATUM.--Land-surface datum is 14.5 ft (4.42 m) National Geodetic Vertical Datum of 1929.
Measuring point: Top edge of recorder shelf, 2.3 ft (0.70 m) above land-surface datum.
REMARKS.--Water levels in this well are affected by tidal fluctuation.
PERIOD OF RECORD.--June 1978 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 25.10 ft (7.650 m) below land-surface datum, Jan. 2, 1979; lowest water level, 34.79 ft (10.604 m) below land-surface datum, July 25, 1978.
EXTREMES FOR CURRENT YEAR.--Highest water level, 25.10 ft (7.650 m) below land-surface datum, Jan. 2; lowest water level, 33.00 ft (10.058 m) below land-surface datum, July 29.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	30.16	28.75	27.73	28.09	29.19		---	28.84	28.17	29.60	30.99	29.34
10	29.81	28.85	28.18	28.19	28.56		---	29.89	28.62	30.28	31.26	29.51
15	29.94	29.01	28.16	28.11	28.31		---	30.18	29.42	30.71	30.66	29.50
20	30.00	28.16	27.54	27.95	28.89		28.31	29.09	29.30	31.13	29.80	28.94
25	29.54	28.34	28.22	27.37	---		28.32	28.72	28.58	31.76	30.11	28.42
EOM	29.81	28.14	27.43	28.04	---		28.72	28.90	29.17	31.57	29.78	28.11
MEAN	29.92	28.59	28.01	27.77	28.63		28.31	29.26	28.84	30.70	30.50	29.08

WTR YR 1979 MEAN 29.11 HIGH 26.65 JAN 2 LOW 32.04 JUL 29

MONMOUTH COUNTY

401518074223001. Local I.D., Manalapan 1 Obs. Unique Well Number, 25-0216.
LOCATION.--Lat 40°15'18", long 74°22'30", Hydrologic Unit 02030105, on the north side of Route 33 about 0.3 mi (0.5 km) west of Woodward Road, Manalapan Township.
Owner: Manalapan Township Water Department.
AQUIFER.--Englishtown Sand of Cretaceous Age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 8 in (203 mm), depth 185 ft (56.4 m), screened 125 to 185 ft (38.1 to 56.4 m).
INSTRUMENTATION.--Water-level extremes recorder. April 1971 to July 1975, water-level recorder.
DATUM.--Land-surface datum is 122.1 ft (37.22 m) National Geodetic Vertical Datum of 1929.
Measuring point: Front edge of cutout in recorder housing, 2.28 ft (0.695 m) above land-surface datum.
PERIOD OF RECORD.--April 1971 to July 1975, January 1977 to current year. Records for 1971 to 1975 are unpublished and are available in files of New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.00 ft (0.000 m) below land-surface datum, May 19-20, 1973; lowest water level, 3.60 ft (1.097 m) below land-surface datum, between Aug. 3 and Nov. 2, 1977.
EXTREMES FOR CURRENT YEAR.--Highest water level, 0.57 ft (0.174 m) below land-surface datum, between Mar. 21 and June 26; lowest water level, 2.53 ft (0.771 m) below land-surface datum, between Aug. 3 and Nov. 22, 1978.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 28	2.85	MAY 9	1.93	AUG 3	3.43

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 2	2.69	FEB 15	0.43	MAY 19	0.82	AUG 3	1.82

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 22	2.50	MAR 21	0.65	JUN 26	1.16	AUG 24	1.91

MONMOUTH COUNTY

402208074145201. Local I.D., Marlboro Obs 1. Unique Well Number, 25-0272.
LOCATION.--Lat 40°22'08", long 74°46'12", Hydrologic Unit 02030104, on the west side of New Jersey Route 79, 0.9 mi (1.45 km) south of Morganville.
Owner: Marlboro Township Municipal Utilities Authority.
AQUIFER.--Farrington Sand Member of the Raritan Formation of Cretaceous Age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in (152 mm), depth 680 ft (207 m), screened 670 to 680 ft (204 to 207 m).
INSTRUMENTATION.--Water-level recorder.
DATUM.--Land-surface datum is 116.9 ft (35.63 m) National Geodetic Vertical Datum of 1929.
Measuring point: Top edge of recorder shelf, 2.5 ft (0.76 m) above land-surface datum.
REMARKS.--Water levels in this well are occasionally affected by pumpage.
PERIOD OF RECORD.--January 1973 to July 1975, March 1977 to current year. Records for 1973 to 1977 are unpublished and are available in files of New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 144.06 ft (43.910 m) below land-surface datum, Apr. 4, 1973; lowest water level, 170.72 ft (52.035 m) below land-surface datum, July 28-29, 1979.
EXTREMES FOR CURRENT YEAR.--Highest water level, 157.45 ft (47.991 m) below land-surface datum, Feb. 22; lowest water level, 170.72 ft (53.035 m) below land-surface datum, July 28-29.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	162.03	160.88				---	---	159.86	162.75	167.13	169.52	165.84
10	161.84	161.06				---	---	162.10	163.44	168.14	169.70	165.56
15	161.48	160.51				160.21	---	162.50	165.08	168.81	167.79	165.71
20	161.00	---				159.87	158.97	162.80	165.80	169.15	167.27	166.01
25	161.20	---				159.73	160.03	162.51	166.82	169.49	166.83	165.31
EOM	161.24	---				---	159.67	162.52	167.57	170.06	165.93	164.51
MEAN	161.54	160.90				160.02	159.48	162.03	164.98	168.64	168.09	165.58

WTR YR 1979 MEAN 164.20 HIGH 158.87 APR 19 LOW 170.41 JUL 29

MONMOUTH COUNTY

402536073590501. Local I.D., Sandy Hook SP Obs. 1. Unique Well Number, 25-0316.
LOCATION.--Lat 40°25'36", long 73°59'05", Hydrologic Unit 02030104, about 1.9 mi (3.1 km) north of the main entrance of Sandy Hook Park, Middletown Township.
Owner: National Park Service (formerly State of New Jersey).
AQUIFER.--Old Bridge Sand Member of the Magothy Formation of Cretaceous Age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 8 in (203 mm), depth 397 ft (121.0 m), screened 371 to 397 ft (113.1 to 121.0 m).
INSTRUMENTATION.--Water-level extremes recorder. May 1965 to August 1975, water-level recorder.
DATUM.--Land-surface datum is 10.9 ft (3.32 m) National Geodetic Vertical Datum of 1929.
Measuring point: Front edge of cutout in recorder housing, 1.20 ft (0.366 m) above land-surface datum.
PERIOD OF RECORD.--May 1965 to August 1975, February 1977 to May 1978,current year beginning November 1978. Records for 1965 to 1975 are unpublished and are available in files of New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 8.99 ft (2.740 m) below land-surface datum, Jan. 23, 1966; lowest water level, 20.12 ft (6.133 m) below land-surface datum, between Sept. 7 and Nov. 2, 1977.
EXTREMES FOR CURRENT YEAR.--Highest water level, 13.19 ft (4.020 m) below land-surface datum, between Jan. 9 and Feb. 21; lowest water level, 18.89 ft (5.758 m) below land-surface datum, between Aug. 16 and Oct. 29, 1979.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
FEB 3	17.35	MAY 6	15.44	AUG 3	17.85	SEP 7	19.17

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 2	17.57	FEB 15	16.15	MAY 11	15.95

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 22	16.06	JAN 9	16.83	FEB 21	15.78	JUN 11	15.92	AUG 9	17.15	AUG 16	18.39

MONMOUTH COUNTY

401906074151401. Local I.D., Village 215 Obs. Unique Well Number, 25-0250.
LOCATION.--Lat 40°19'18", long 74°15'29", Hydrologic Unit 02030105, near intersection of River Drive and Newport Road, about 0.6 mi (1.0 km) northwest of Route 79 in Marlboro.
Owner: Gordons Corner Water Company.
AQUIFER.--Englishtown Sand of Cretaceous Age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in (152 mm), depth 215 ft (65.5 m), screened 186 to 215 ft (56.7 to 65.5 m).
INSTRUMENTATION.--Water-level extremes recorder. April 1971 to July 1975, water-level recorder.
DATUM.--Land-surface datum is 138.6 ft (42.25 m) National Geodetic Vertical Datum of 1929.
Measuring point: Front edge of cutout in recorder housing, 2.58 ft (0.786 m) above land-surface datum.
PERIOD OF RECORD.--April 1971 to July 1975, January 1977 to current year. Records for 1971 to 1975 are unpublished and are available in files of New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 35.30 ft (10.759 m) below land-surface datum, Jan. 9-10, 1972; lowest water level, 39.09 ft (11.915 m) below land-surface datum, between Aug. 3 and Nov. 3, 1977.
EXTREMES FOR CURRENT YEAR.--Highest water level, 36.59 ft (11.153 m) below land-surface datum, between Mar. 21 and June 26; lowest water level, 38.38 ft (11.698 m) below land-surface datum, between Nov. 3 and Mar. 21.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 28	37.90	MAY 6	36.69	AUG 3	38.31

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 3	38.64	FEB 15	36.36	MAY 18	36.60	AUG 3	37.38

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 3	38.27	MAR 21	36.68	JUN 26	37.01	AUG 16	37.53

MORRIS COUNTY

404639074230001. Local I.D., Briarwood School Obs. Unique Well Number, 27-0012.
LOCATION.--Lat 40°46'39", long 74°23'00", Hydrologic Unit 02030103, at the Briarwood School near Florham Park.
Owner: U.S. Geological Survey.
AQUIFER.--Stratified drift of Pleistocene Age.
WELL CHARACTERISTICS.--Drilled semi-artesian observation well, diameter 6 in (152 mm), depth 110 ft (33.5 m), screened 100 to 110 ft (30.5 to 33.5 m).
INSTRUMENTATION.--Water-level recorder.
DATUM.--Land-surface datum is 198 ft (60.4 m) National Geodetic Vertical Datum of 1929.
Measuring point: Top edge of recorder shelf, 3.0 ft (0.91 m) above land-surface datum.
PERIOD OF RECORD.--March 1967 to May 1975, April 1977 to current year. Records for 1967 to 1975 are unpublished and are available in files of New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 34.17 ft (10.415 m) below land-surface datum, June 3, 1968; lowest water level, 50.63 ft (15.432 m) below land-surface datum, Oct. 4, 31, 1977.
EXTREMES FOR CURRENT YEAR.--Highest water level, 46.16 ft (14.070 m) below land-surface datum, June 17; lowest water level, 49.61 ft (15.121 m) below land-surface datum, Oct. 17.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	49.27	48.94	49.18	49.07	48.27	48.44	47.38	47.24	46.53	46.51	47.95	48.75
10	49.33	48.94	49.38	49.05	48.23	48.18	47.57	47.27	46.38	46.69	48.00	48.79
15	49.42	48.85	48.96	---	48.10	48.38	47.24	47.70	46.29	47.25	48.06	48.97
20	49.29	48.87	48.77	---	48.21	48.00	47.43	47.57	46.61	47.55	48.25	49.05
25	49.17	48.99	48.60	48.49	48.35	47.80	47.34	47.35	46.66	47.67	48.36	48.82
EOM	48.95	48.97	48.97	48.33	48.52	47.51	47.30	46.95	46.53	47.84	48.66	48.74
MEAN	49.27	48.89	49.00	48.81	48.26	48.12	47.41	47.38	46.52	47.18	48.17	48.83

WTR YR 1979 MEAN 48.14 HIGH 46.21 JUN 17 LOW 49.54 OCT 16

OCEAN COUNTY

400416074270101. Local I.D., Colliers Mills TW 1 Obs. Unique Well Number, 29-0138.
LOCATION.--Lat 40°04'14", long 74°27'02", Hydrologic Unit 02040301, along western shore of Colliers Mills Pond, Jackson Township.
Owner: U.S. Geological Survey.
AQUIFER.--Englishtown Sand of Cretaceous Age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in (152 mm), depth 427 ft (130.2 m), screened 417 to 427 ft (127.1 to 130.2 m).
INSTRUMENTATION.--Water-level recorder.
DATUM.--Land-surface datum is 136.5 ft (41.61 m) National Geodetic Vertical Datum of 1929.
Measuring point: Top of 6 inch coupling, 2.2 ft (0.67 m) above land-surface datum.
PERIOD OF RECORD.--February 1964 to July 1975, March 1977 to current year. Records for 1964 to 1975 are unpublished and are available in files of New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 52.02 ft (15.856 m) below land-surface datum, Feb. 19, 1964; lowest water level, 71.69 ft (21.851 m) below land-surface datum, Sept. 15-16, 1977.
EXTREMES FOR CURRENT YEAR.--Highest water level, 70.79 ft (21.577 m) below land-surface datum, Jan. 21 and Feb. 26; lowest water level, 71.61 ft (21.827 m) below land-surface datum, Nov. 16-17.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	71.15	71.40	71.36	71.45	71.13	71.04	70.97	70.97	70.87	71.10	71.19	71.45
10	71.25	71.48	71.35	71.31	71.17	70.94	70.94	71.01	70.98	71.19	71.28	71.39
15	71.23	71.54	71.37	71.32	71.14	70.99	70.89	70.99	71.04	71.20	71.25	71.38
20	71.26	71.58	71.34	71.22	71.16	70.97	71.02	70.96	71.07	71.30	71.33	71.48
25	71.32	71.46	71.18	70.85	70.95	70.86	71.03	70.88	71.09	71.29	71.38	71.48
EOM	71.43	71.42	71.46	71.02	70.99	71.02	70.97	71.00	71.08	71.32	71.40	71.45
MEAN	71.25	71.48	71.38	71.19	71.11	70.99	70.99	70.98	71.01	71.22	71.31	71.42

WTR YR 1979 MEAN 71.19 HIGH 70.83 FEB 26 LOW 71.58 NOV 16 AND OTHERS

OCEAN COUNTY

400416074270103. Local I.D., Colliers Mills TW 3 Obs. Unique Well Number, 29-0140.
LOCATION.--Lat 40°04'14", long 74°27'02", Hydrologic Unit 02040301, along western shore of Colliers Mills pond, Jackson Township.
Owner: U.S. Geological Survey.
AQUIFER.--Mount Laurel Sand-Wenonah Formation undifferentiated of Cretaceous Age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in (152 mm), depth 270 ft (82.3 m), screened 257 to 267 ft (78.3 to 81.4 m).
INSTRUMENTATION.--Water-level extremes recorder. January 1964 to July 1975, water-level recorder.
DATUM.--Land-surface datum is 135.2 ft (41.21 m) National Geodetic Vertical Datum of 1929.
Measuring point: Front edge of cutout in recorder housing, 3.49 ft (1.064 m) above land-surface datum.
PERIOD OF RECORD.--January 1964 to July 1975, October 1976 to current year. Records for 1964 to 1975 are unpublished and are available in files of New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 15.72 ft (4.791 m) below land-surface datum, May 9, 1964; lowest water level, 21.58 ft (6.578 m) below land-surface datum, between Sept. 6 and Nov. 4, 1977.
EXTREMES FOR CURRENT YEAR.--Highest water level, 19.12 ft (5.828 m) below land-surface datum, between Mar. 5 and May 25; lowest water level, 20.42 ft (6.224 m) below land-surface datum, between Aug. 6 and Sept. 17.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 20	20.51	NOV 17	20.60	DEC 14	20.74	FEB 2	20.86	MAY 20	20.79	JUL 12	21.25
SEP 6	21.37										

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 4	21.35	JAN 5	20.26	MAR 15	19.53	MAY 22	19.64	JUL 13	19.71	SEP 21	19.95

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 13	20.40	JAN 10	20.16	MAR 5	19.57	MAY 25	19.26	AUG 6	20.00	SEP 17	20.42

OCEAN COUNTY

395714074223401. Local I.D., Crammer Obs. Unique Well Number, 29-0486.
LOCATION.--Lat 39°57'14", long 74°22'34", Hydrologic Unit 02040301, about 800 ft (244 m) east of Central Railroad of New Jersey, Whiting.
Owner: Mr. Frank Reynolds (formerly Mrs. William Crammer).
AQUIFER.--Cohansey Sand of Miocene(?) and Pliocene(?) Age.
WELL CHARACTERISTICS.--Water-table observation well, diameter 8 in (203 mm), depth 69 ft (21.0 m), slotted steel casing gravel packed.
INSTRUMENTATION.--Water-level recorder.
DATUM.--Land-surface datum is 179 ft (54.6 m) National Geodetic Vertical Datum of 1929.
Measuring point: Top of 8-inch coupling, 0.9 ft (0.27 m) above land-surface datum.
REMARKS.--Originally a dug well in which casing was inserted on March 31, 1966.
PERIOD OF RECORD.--1952 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 47.80 ft (14.569 m) below land-surface datum, June 9-14, 20-29, 1973; lowest water level, well dry, November 1957 to February 1958, December 1965.
EXTREMES FOR CURRENT YEAR.--Highest water level, 48.99 ft (14.932 m) below land-surface datum, Apr. 15-17; lowest water level, 52.46 ft (15.990 m) below land-surface datum, Jan. 16-17.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	51.08	51.47	51.95	52.39	51.83	50.83	49.09	49.19	49.59	49.68	50.09	50.63
10	51.15	51.55	52.04	52.42	51.54	50.58	49.01	49.29	49.61	49.74	50.17	50.66
15	51.17	51.64	52.10	52.43	51.32	50.27	48.99	49.39	49.63	49.77	50.27	50.63
20	51.23	51.74	52.16	52.45	51.18	49.90	49.03	49.48	49.64	49.85	50.35	50.68
25	51.31	51.79	52.20	52.31	51.06	49.50	49.08	49.50	49.65	49.93	50.44	50.75
EOM	51.41	51.88	52.33	52.09	50.99	49.24	49.12	49.59	49.66	50.00	50.55	50.80
MEAN	51.21	51.65	52.11	52.36	51.42	50.15	49.06	49.38	49.62	49.81	50.28	50.68

WTR YR 1979 MEAN 50.64 HIGH 48.99 APR 15 AND OTHERS LOW 52.46 JAN 17

OCEAN COUNTY

394829074053501. Local I.D., Island Beach 1 Obs. Unique Well Number, 29-0017.
LOCATION.--Lat 39°48'29", long 74°05'35", Hydrologic Unit 02040301, in Island Beach State Park about 6.6 mi (10.6 km) south of main entrance, Berkley Township.
Owner: U.S. Geological Survey.
AQUIFER.--Kirkwood Formation of Miocene Age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in (152 mm), depth 397 ft (121.0 m), screened 377 to 397 ft (114.9 to 121.0 m).
INSTRUMENTATION.--Water-level extremes recorder. July 1962 to March 1975, water-level recorder.
DATUM.--Land-surface datum is 8.5 ft (2.59 m) National Geodetic Vertical Datum of 1929.
Measuring point: Front edge of cutout in recorder housing, 3.40 ft (1.036 m) above land-surface datum.
PERIOD OF RECORD.--July 1962 to March 1975, February 1977 to current year. Records for 1962 to 1975 are unpublished and are available in files of New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.05 ft (0.015 m) below land-surface datum, Dec. 6, 1962; lowest water level, 6.14 ft (1.871 m) below land-surface datum, between Dec. 13 and Jan. 10, 1979.
EXTREMES FOR CURRENT YEAR.--Highest water level, 2.41 ft (0.735 m) below land-surface datum, between Jan. 10 and Mar. 5; lowest water level, 6.14 ft (1.871 m) below land-surface datum, between Dec. 13 and Jan. 10.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
FEB 2	5.17	MAY 9	3.06	JUL 11	4.42	AUG 3	4.14

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 17	4.62	FEB 15	3.46	MAY 16	3.60	AUG 4	3.95

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 9	4.43	DEC 13	5.17	JAN 10	5.50	MAR 5	4.45	MAY 22	4.33	AUG 6	4.68

OCEAN COUNTY

394829074053503. Local I.D., Island Beach 3 Obs. Unique Well Number, 29-0019.
LOCATION.--Lat 39°48'29", long 74°05'35", Hydrologic Unit 02040301, in Island Beach State Park about 6.6 mi (10.6 km) south of main entrance, Berkley Township.
Owner: U.S. Geological Survey.
AQUIFER.--Potomac-Raritan-Magothy Aquifer system of Cretaceous Age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 8 in (203 mm), depth 2,756 ft (840.0 m), screened 2,736 to 2,756 ft (833.9 to 840.0 m).
INSTRUMENTATION.--Water-level extremes recorder. November 1968 to March 1975, water-level recorder.
DATUM.--Land-surface datum is 9.0 ft (2.74 m) National Geodetic Vertical Datum of 1929.
Measuring point: Front edge of cutout in recorder housing, 5.11 ft (1.558 m) above land-surface datum.
PERIOD OF RECORD.--November 1968 to March 1975, February 1977 to current year. Records for 1968 to 1975 are unpublished and are available in files of New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 5.95 ft (1.814 m) above land-surface datum, Apr. 23, 1969; lowest water level, 11.19 ft (3.411 m) below land-surface datum, between Aug. 6 and Oct. 31, 1979.
EXTREMES FOR CURRENT YEAR.--Highest water level, 7.40 ft (2.256 m) below land-surface datum, between Jan. 10 and Mar. 5; lowest water level, 11.19 ft (3.411 m) below land-surface datum, between Aug. 6 and Oct. 31, 1979.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
FEB 2	6.22	MAY 9	5.23	AUG 3	7.23

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV. 18	8.43	FEB 15	8.31	MAY 16	8.39	MAY 22	9.56	AUG 4	8.69

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 9	8.80	DEC 13	9.87	JAN 10	10.32	MAR 5	9.55	MAY 9	9.79	MAY 22	10.11
AUG 6	10.43										

OCEAN COUNTY

395930074142101. Local I.D., Toms River Chem 84 Obs. Unique Well Number, 29-0085.
LOCATION.--Lat 39°59'29", long 74°14'20", Hydrologic Unit 02040301, on the lands of Toms River Chemical Company, Dover Township.
Owner: Toms River Chemical Company.
AQUIFER.--Potomac-Raritan-Magothy Aquifer system of Cretaceous Age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 8 in (203 mm), depth 1,480 ft (451 m), screened 1,460 to 1,480 ft (445 to 451 m).
INSTRUMENTATION.--Water-level recorder.
DATUM.--Land-surface datum is 66.7 ft (20.33 m) National Geodetic Vertical Datum of 1929.
Measuring point: Top edge of recorder shelf, 2.7 ft (0.82 m) above land-surface datum.
PERIOD OF RECORD.--July 1968 to July 1975, March 1977 to current year. Records for 1968 to 1975 are unpublished and are available in files of New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 62.32 ft (18.995 m) below land-surface datum, July 19, 1968 and February 9, 1969; lowest water level, 90.40 ft (27.553 m) below land-surface datum, Sept. 27, 1979.
EXTREMES FOR CURRENT YEAR.--Highest water level, 88.34 ft (26.926 m) below land-surface datum, Jan. 25; lowest water level, 90.40 ft (27.553 m) below land-surface datum, Sept. 27.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	89.03	89.26	89.15	89.36	88.85	88.82	88.73	88.94	88.85	89.37	89.73	90.05
10	89.13	89.39	89.24	89.17	88.96	88.62	88.75	89.01	89.05	89.53	89.82	90.08
15	89.03	89.43	89.25	89.11	88.93	88.73	88.71	88.97	89.23	89.54	89.85	90.10
20	89.07	89.54	89.18	89.02	89.03	88.71	88.98	88.97	89.33	89.64	89.96	90.29
25	89.19	89.28	88.87	88.39	88.73	88.53	88.99	88.76	89.34	89.63	90.05	90.35
EOM	89.36	89.25	89.36	88.67	88.65	88.82	88.93	89.02	89.31	89.72	90.01	90.31
MEAN	89.11	89.37	89.24	88.93	88.89	88.74	88.87	88.97	89.16	89.54	89.89	90.15

WTR YR 1979 MEAN 89.24 HIGH 88.39 JAN 25 LOW 90.38 SEP 27

OCEAN COUNTY

395609074124001. Local I.D., Toms River TW 2 Obs. Unique Well Number, 29-0534.
LOCATION.--Lat 39°56'09", long 74°12'40", Hydrologic Unit 02040301, about 200 ft (61.0 m) east of Double Trouble Road on the north side of Jakes Branch, South Toms River.
Owner: U.S. Geological Survey.
AQUIFER.--Englishtown Sand of Cretaceous Age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 8 in (203 mm), depth 1,146 ft (349.3 m), screened 1,080 to 1,146 ft (329.2 to 349.3 m).
INSTRUMENTATION.--Water-level extremes recorder. December 1965 to March 1975, water-level recorder.
DATUM.--Land-surface datum is 18.3 ft (5.58 m) National Geodetic Vertical Datum of 1929.
Measuring point: Front edge of cutout in recorder housing, 1.70 ft (0.518 m) above land-surface datum.
PERIOD OF RECORD.--December 1965 to March 1975, February 1977 to current year. Records for 1965 to 1975 are unpublished and are available in files of New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 48.37 ft (14.743 m) below land-surface datum, May 28, 1966; lowest water level, 100.21 ft (30.544 m) below land-surface datum, between Aug. 4 and Nov. 9, 1978.
EXTREMES FOR CURRENT YEAR.--Highest water level, 96.39 ft (29.380 m) below land-surface datum, between Jan. 10 and Feb. 22; lowest water level, 100.21 ft (30.544 m) below land-surface datum between Aug. 4 and Nov. 9, 1978.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
FEB 7	89.23	MAY 9	89.67	JUL 11	90.62

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 3	92.28	FEB 15	92.37	MAY 16	92.98	MAY 22	92.99	AUG 4	94.25

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 9	96.90	JAN 10	96.96	FEB 22	96.98	MAY 22	96.98	AUG 6	97.43

PASSAIC COUNTY

410209074170801. Local I.D., Haskell Obs. Unique Well Number, 31-0011.
LOCATION.--Lat 41°02'09", long 74°17'08", Hydrologic Unit 02030103, at well field at north end of 4th Avenue, Wanaque.
Owner: Wanaque Water Department.
AQUIFER.--Glacial Till of Pleistocene Age.
WELL CHARACTERISTICS.--Dug water-table observation well, diameter 16 ft (4.9 m), depth 26 ft (7.9 m).
INSTRUMENTATION.--Water-level recorder.
DATUM.--Land-surface datum is 260.5 ft (79.40 m) National Geodetic Vertical Datum of 1929.
Measuring point: Top edge of concrete pump base, 2.2 ft (0.67 m) above land-surface datum.
PERIOD OF RECORD.--May 1965 to August 1970, April 1977 to current year. Records for 1965 to 1970 are unpublished and are available in files of New Jersey District Office.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 2.02 ft (0.616 m) below land-surface datum, Mar. 27, 1978; lowest water level, 16.01 ft (4.880 m) below land-surface datum, Aug. 30, 1965.
EXTREMES FOR CURRENT YEAR.--Highest water level, 3.31 ft (1.009 m) below land-surface datum, May 26; lowest water level, 11.06 ft (3.371 m) below land-surface datum, Aug. 5-6.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	7.69	7.76	7.68	6.57	7.13	6.68	6.45	6.36	6.21	7.47	10.99	7.56
10	7.73	7.79	6.98	6.15	7.30	4.62	6.45	6.92	6.63	7.50	9.91	6.76
15	7.71	7.82	7.23	6.59	7.59	5.44	5.94	7.15	6.79	8.05	7.53	7.14
20	7.78	7.73	7.52	7.12	7.63	6.34	6.25	7.04	7.18	7.51	7.54	7.39
25	7.71	7.64	7.34	5.36	6.82	6.61	6.81	4.08	7.39	7.55	7.54	8.52
EOM	7.75	7.70	7.36	6.66	6.44	6.39	5.84	5.38	7.42	9.89	7.56	10.41
MEAN	7.73	7.75	7.39	6.47	7.25	5.91	6.37	6.26	6.83	7.97	8.44	7.63

WTR YR 1979 MEAN 7.17 HIGH 3.43 MAY 26 LOW 10.99 AUG 5

UNION COUNTY

404027074164401. Local I.D., White Lab. 3 Obs. Unique Well Number, 39-0102.
LOCATION.--Lat 40°40'27", long 74°16'44", Hydrologic Unit 02030104, at north end of South 31st Street, Kenilworth.
Owner: Schering Corporation.
AQUIFER.--Brunswick Shale of Late Triassic Age.
WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 8 in (203 mm), cased to approximately 40 ft (12.2 m), depth 251 ft (76.5 m), open hole.
INSTRUMENTATION.--Water-level recorder.
DATUM.--Land-surface datum is 85.2 ft (25.97 m) National Geodetic Vertical Datum of 1929.
Measuring point: Top edge of recorder shelf at land-surface datum.
REMARKS.--Land-surface datum prior to February 1974, 4.2 ft (1.28 m) lower.
PERIOD OF RECORD.--1952 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 10.51 ft (3.203 m) below land-surface datum, Apr. 17, 1961; lowest water level, 46.10 ft (14.051 m) below land-surface datum, Mar. 7, 1952.
EXTREMES FOR CURRENT YEAR.--Highest water level, 19.52 ft (5.950 m) below land-surface datum, Mar. 16; lowest water level, 26.59 ft (8.105 m) below land-surface datum, Dec. 2.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	24.15	25.46	24.29	22.17	22.68	24.51	22.31	22.59	21.56	24.38	22.55
10	---	25.46	24.97	23.91	23.14	22.33	23.20	22.71	22.44	21.67	25.17	22.54
15	---	25.52	25.35	23.47	---	21.41	21.96	23.01	22.25	21.59	23.70	22.55
20	25.11	25.39	25.02	23.40	---	22.41	---	22.97	22.51	21.60	23.06	24.00
25	25.10	24.84	23.97	22.72	22.61	22.11	---	22.89	22.54	22.81	23.33	22.78
EOM	25.16	26.11	23.72	22.56	23.25	22.13	22.11	22.52	21.95	23.29	23.65	22.82
MEAN	25.09	25.18	24.98	23.35	22.74	22.37	23.02	22.66	22.41	21.96	23.66	22.69

WTR YR 1979 MEAN 23.29 HIGH 20.01 MAR 16 LOW 26.27 DEC 1

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

ATLANTIC COUNTY

WELL NUMBER	LOCAL IDENT-I-FIER	LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	GEO-LOGIC UNIT	DATE OF SAMPLE	TEMPER-ATURE (DEG C)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
367	LONGPORT BORO WD 2	39 18 59	074 31 22	01	122KRKDL	79-08-27	19.0	180	7.5	7.1
582	NJWC-ATL CO-DOBBS AVE	39 19 05	074 36 31	01	121CNSY	79-08-28	14.5	122	4.9	17
590	NJWC-ATL CO-GROVELAND	39 19 24	074 35 49	01	121CNSY	79-08-28	13.0	304	4.8	80
599	VENTNOR CITY WD 9	39 20 32	074 28 55	02	122KRKDL	79-08-27	19.5	159	7.3	5.3
30	CHALFONTE HOTEL-NEW	39 21 32	074 26 22	01	122KRKDL	79-08-27	19.0	172	7.6	8.4
549	NJWC-ATL CO-MILL ROAD	39 21 58	074 33 17	01	121CNSY	79-08-28	13.5	122	4.9	13
39	BRIGANTINE CITY WD 4-66	39 23 24	074 23 14	01	122KRKDL	79-08-27	19.5	146	7.1	3.9
558	NJWC-ATL CO-WOODLAND AVE	39 23 33	074 31 44	01	121CNSY	79-08-28	13.0	60	5.1	8.6
41	BRIGANTINE CITY WD 1-25	39 24 31	074 21 53	01	122KRKDL	79-08-27	19.0	130	7.2	4.2
5	ATLANTIC CITY WD 2	39 24 36	074 30 33	01	121CNSY	79-08-27	13.5	118	5.1	16
567	ATLANTIC CITY WD 3	39 24 43	074 30 35	01	121CNSY	79-08-27	14.5	75	5.6	7.7
572	ATLANTIC CITY WD 4A-68	39 24 46	074 30 32	01	121CNSY	79-08-27	13.5	397	4.9	93
13	NJWC-ATL CO-ABSECON 1	39 25 51	074 30 23	01	121CNSY	79-08-28	12.5	50	4.8	6.6

LOCAL IDENT-I-FIER	DATE OF SAMPLE	ELEV. OF LAND SURFACE DATUM (FT. NGVD)	DEPTH OF HOLE, TOTAL (FEET)	DEPTH OF WELL, TOTAL (FEET)	DEPTH TO TOP OF WATER-BEARING ZONE (FT)	DEPTH TO BOT-TOM OF WATER-BEARING ZONE (FT)	DEPTH TO TOP OF SAMPLE INTER-VAL (FT)	DEPTH TO BOT-TOM OF SAMPLE INTER-VAL (FT)	PUMP OR FLOW PERIOD PRIOR TO SAM-PLING (MIN)	FLOW RATE, INSTAN-TANEOUS (GPM)
LONGPORT BORO WD 2	79-08-27	10.00	818	800	739	808	750	800	20	550
NJWC-ATL CO-DOBBS AVE	79-08-28	20.00	--	99	--	--	79	99	1440	400
NJWC-ATL CO-GROVELAND	79-08-28	19.00	188	159	127	159	129	159	10	700
VENTNOR CITY WD 9	79-08-27	8.00	835	803	732	802	740	800	240	800
CHALFONTE HOTEL-NEW	79-08-27	8.00	--	844	--	--	797	837	--	--
NJWC-ATL CO-MILL ROAD	79-08-28	20.00	--	152	--	--	117	152	10	700
BRIGANTINE CITY WD 4-66	79-08-27	10.00	788	783	737	788	733	783	360	1000
NJWC-ATL CO-WOODLAND AVE	79-08-28	50.00	--	157	--	--	--	--	120	700
BRIGANTINE CITY WD 1-25	79-08-27	9.00	--	829	--	--	769	829	60	650
ATLANTIC CITY WD 2	79-08-27	11.00	--	116	--	--	67	97	120	1300
ATLANTIC CITY WD 3	79-08-27	8.00	--	208	--	--	178	208	15	1200
ATLANTIC CITY WD 4A-68	79-08-27	8.00	118	105	70	115	75	105	120	1200
NJWC-ATL CO-ABSECON 1	79-08-28	30.00	263	205	160	204	177	205	120	700

Geologic unit (aquifer):
121CNSY - Cohansey Sand
122KRKDL - Kirkwood Formation, Lower Sand

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

CAPE MAY COUNTY

WELL NUMBER	LOCAL IDENT-I-FIER	LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	GEO-LOGIC UNIT	DATE OF SAMPLE	TEMPER-ATURE (DEG C)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
18	US COAST GUARD 2	38 56 52	074 53 27	01	121CNSY	79-08-30	15.5	327	7.8	28
154	WILDWOOD WD PINE 2	38 59 32	074 48 51	02	121CNSY	79-08-29	15.5	660	7.4	110
132	STONE HARBOR WD 4	39 03 01	074 45 45	01	122KRKDL	79-08-29	20.0	337	8.6	30
2	AVALON BORO WD 7-71	39 04 20	074 44 35	02	122KRKDL	79-08-28	20.0	254	8.5	12
5	AVALON BORO WD 8-76	39 05 45	074 43 26	01	122KRKDL	79-08-28	19.5	236	8.5	10
8	AVALON BORO WD 3-30	39 06 21	074 42 48	01	122KRKDL	79-08-28	19.5	332	8.4	36
129	SEA ISLE CITY WD 2	39 09 25	074 41 31	01	122KRKDL	79-08-28	19.0	237	8.2	11
106	NJWC-OCEAN CITY DIST 7	39 13 43	074 37 55	01	122KRKDL	79-08-28	19.5	201	7.8	10
124	NJWC-OCEAN CITY DIST 13	39 17 12	074 33 40	01	122KRKDL	79-08-28	19.5	195	7.7	9.4

LOCAL IDENT-I-FIER	DATE OF SAMPLE	ELEV. OF LAND SURFACE DATUM (FT. NGVD)	DEPTH OF HOLE, TOTAL (FEET)	DEPTH OF WELL, TOTAL (FEET)	DEPTH TO TOP OF WATER-BEARING ZONE (FT)	DEPTH TO BOT-TOM OF WATER-BEARING ZONE (FT)	DEPTH TO TOP OF SAMPLE INTER-VAL (FT)	DEPTH TO BOT-TOM OF SAMPLE INTER-VAL (FT)	PUMP OR FLOW PERIOD PRIOR TO SAM-PLING (MIN)	FLOW RATE, INSTAN-TANEOUS (GPM)
US COAST GUARD 2	79-08-30	11.00	--	325	--	--	295	325	10	500
WILDWOOD WD PINE 2	79-08-29	10.00	364	364	--	--	304	354	60	280
STONE HARBOR WD 4	79-08-29	10.00	965	880	820	952	830	880	60	650
AVALON BORO WD 7-71	79-08-28	10.00	905	861	807	870	821	861	10	650
AVALON BORO WD 8-76	79-08-28	8.00	982	839	777	840	784	839	720	700
AVALON BORO WD 3-30	79-08-28	10.00	--	925	--	--	845	925	10	350
SEA ISLE CITY WD 2	79-08-28	7.00	864	864	--	--	744	861	10	500
NJWC-OCEAN CITY DIST 7	79-08-28	8.00	810	810	--	--	760	810	180	860
NJWC-OCEAN CITY DIST 13	79-08-28	8.00	902	843	749	877	757	840	360	700

Geologic unit (aquifer):
121CNSY - Cohansey Sand
122KRKDL - Kirkwood Formation, Lower Sand

QUALITY OF GROUND WATER

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

MIDDLESEX COUNTY

WELL NUMBER	LOCAL IDENT- I- FIER	LAT- I- TUDE	LONG- I- TUDE	SEQ. NO.	GEO- LOGIC UNIT	DATE OF SAMPLE	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	ELEV. OF LAND SURFACE DATUM (FT. NGVD)
192	PERTH AMBOY WD 3	40 25 35	074 20 14	01	2110DBG	79-09-20	11.5	278	33	15.00
193	PERTH AMBOY WD 4	40 25 36	074 20 12	02	2110DBG	79-09-20	13.0	420	100	15.00
195	PERTH AMBOY WD 5	40 25 37	074 20 02	01	2110DBG	79-09-20	12.5	161	14	15.00
196	PERTH AMBOY WD 1A	40 25 37	074 20 20	01	211FRNG	79-09-20	12.5	66	4.2	20.00
197	PERTH AMBOY WD 2	40 25 43	074 20 10	01	211FRNG	79-09-20	12.5	158	27	20.00
434	SOUTH RIVER BORO WD 2	40 25 56	074 21 41	01	211FRNG	79-09-20	12.5	53	5.7	20.00
432	SOUTH RIVER BORO WD 4-75	40 25 57	074 21 38	02	211FRNG	79-09-20	13.5	76	8.0	20.00
438	SOUTH RIVER BORO WD 5-77	40 25 59	074 21 42	02	211FRNG	79-09-20	12.0	57	6.3	20.00
346	SAYREVILLE BORO WD B	40 26 04	074 20 04	01	2110DBG	79-09-26	--	460	81	27.00
352	SAYREVILLE BORO WD M	40 26 09	074 19 52	01	211FRNG	79-09-26	12.0	690	190	35.00
354	SAYREVILLE BORO WD C	40 26 12	074 20 10	01	2110DBG	79-09-26	13.0	360	78	32.00
440	THOMAS AND CHADWICK 1	40 26 47	074 22 27	01	211FRNG	79-09-20	--	248	42	21.00
386	EI DUPONT-PARLIN 6	40 27 01	074 19 17	01	211FRNG	79-09-26	12.5	67	3.5	103.00
389	EI DUPONT-PARLIN 5	40 27 10	074 19 10	01	211FRNG	79-09-26	12.5	63	3.8	118.00
392	EI DUPONT-PARLIN 1	40 27 15	074 19 24	01	211FRNG	79-09-26	13.0	120	16	104.00
393	EI DUPONT-PARLIN 3	40 27 15	074 19 32	01	211FRNG	79-09-26	13.5	298	60	91.00
401	SAYREVILLE BORO WD P	40 27 44	074 16 28	01	211FRNG	79-09-26	12.5	61	2.1	40.00
403	SAYREVILLE BORO WD Q-73	40 27 45	074 16 31	01	2110DBG	79-09-26	12.5	180	24	40.00
425	DUHERNAL WATER SYS. 60F	40 27 29	074 19 38	01	211FRNG	79-09-26	15.5	3020	750	149.00

LOCAL IDENT- I- FIER	DATE OF SAMPLE	DEPTH OF HOLE, TOTAL (FEET)	DEPTH OF WELL, TOTAL (FEET)	DEPTH TO TOP OF WATER- BEARING ZONE (FT)	DEPTH TO BOT- TOM OF WATER- BEARING ZONE (FT)	DEPTH TO TOP OF SAMPLE INTER- VAL (FT)	DEPTH TO BOT- TOM OF SAMPLE INTER- VAL (FT)	PUMP OR FLOW PERIOD PRIOR TO SAM- PLING (MIN)	FLOW RATE, INSTAN- TANEOUS (GPM)
PERTH AMBOY WD 3	79-09-20	80	68	46	68	48	68	30	600
PERTH AMBOY WD 4	79-09-20	69	66	33	66	51	66	10	500
PERTH AMBOY WD 5	79-09-20	--	80	50	--	50	80	15	650
PERTH AMBOY WD 1A	79-09-20	278	261	194	267	201	261	1440	1500
PERTH AMBOY WD 2	79-09-20	--	260	205	--	205	260	15	1000
SOUTH RIVER BORO WD 2	79-09-20	--	198	172	198	173	198	120	600
SOUTH RIVER BORO WD 4-75	79-09-20	207	179	150	178	149	179	25	240
SOUTH RIVER BORO WD 5-77	79-09-20	208	187	116	181	132	182	180	800
SAYREVILLE BORO WD B	79-09-26	--	81	--	--	71	81	120	500
SAYREVILLE BORO WD M	79-09-26	--	280	--	--	225	278	480	1200
SAYREVILLE BORO WD C	79-09-26	--	73	--	--	60	73	120	500
THOMAS AND CHADWICK 1	79-09-20	--	195	--	--	167	195	60	5.0
EI DUPONT-PARLIN 6	79-09-26	370	325	246	318	253	314	20	500
EI DUPONT-PARLIN 5	79-09-26	312	309	251	308	257	305	20	500
EI DUPONT-PARLIN 1	79-09-26	310	286	228	291	237	286	10	520
EI DUPONT-PARLIN 3	79-09-26	295	284	248	291	246	284	10	500
SAYREVILLE BORO WD P	79-09-26	--	288	--	--	254	288	1440	1150
SAYREVILLE BORO WD Q-73	79-09-26	140	136	76	138	78	136	1440	300
DUHERNAL WATER SYS. 60F	79-09-26	288	287	267	--	282	287	75	20

Geologic unit (aquifer):
2110DBG - Magothy Formation, Old Bridge Sand Member
211FRNG - Raritan Formation, Farrington Sand Member

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

MONMOUTH COUNTY

WELL NUMBER	LOCAL IDENT- I- FIER	LAT- I- TUDE	LONG- I- TUDE	SEQ. NO.	GEO- LOGIC UNIT	DATE OF SAMPLE	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
29	BRIELLE BORO WD 1	40 06 44	074 03 44	01	122KRKD	79-07-31	14.0	93	6.5	7.0
233	MANASQUAN BORO WD 6	40 07 10	074 03 29	02	122KRKD	79-07-31	13.0	61	4.9	9.1
234	MANASQUAN BORO WD 3	40 07 12	074 03 28	01	122KRKD	79-07-31	13.0	94	4.6	13
235	MANASQUAN BORO WD 2R	40 07 12	074 03 28	02	122KRKD	79-07-31	13.5	77	4.9	11
237	MANASQUAN BORO WD 5	40 07 14	074 03 29	01	122KRKD	79-07-31	13.0	69	5.1	9.8
464	SEA GIRT BORO WD 6	40 08 01	074 02 31	01	122KRKD	79-07-31	13.5	76	5.8	10
374	SEA GIRT BORO WD 5	40 08 04	074 02 27	01	211EGLS	79-07-31	19.0	165	8.0	1.0
383	SPRING LAKE BORO WD 1	40 08 49	074 02 07	01	211EGLS	79-07-31	19.5	182	7.9	.9
386	SPRING LAKE BORO WD 4	40 09 52	074 01 49	01	211EGLS	79-07-31	19.5	180	7.8	.8
18	BELMAR BORO WD 2-ELEC	40 10 38	074 01 46	02	211EGLS	79-08-01	18.0	215	8.2	1.2
26	BELMAR BORO WD 4-ELEC	40 11 02	074 00 45	01	211EGLS	79-08-01	19.5	187	7.8	.8
13	AVON-BY-THE-SEA WD 4	40 11 37	074 01 21	02	211MGRR	79-08-01	23.5	128	6.6	1.2
14	AVON-BY-THE-SEA WD 1	40 11 38	074 01 25	01	211MLRW	79-08-01	18.0	244	8.1	1.5
1	ALLENHURST BORO WD 4	40 14 01	074 00 25	01	211EGLS	79-08-01	19.5	209	7.5	1.3
358	RED BANK BORO WD 18-50	40 20 47	074 04 20	01	211MGRR	79-08-01	17.0	105	6.6	1.4
190	KEANSBURG BORO WD 4	40 26 21	074 07 38	01	211ODBG	79-09-12	13.5	83	6.4	1.8
116	HIGHLANDS BORO WD 2-NEW	40 24 00	073 59 12	01	211MGRR	79-09-12	20.0	106	6.6	.6
119	HIGHLANDS BORO WD 3-73	40 24 03	073 59 53	01	211MGRR	79-09-12	--	107	6.6	.7
8	ATL HIGHLANDS BORO WD 3	40 24 41	074 02 33	01	211ODBG	79-09-12	--	162	6.7	3.8
9	ATL HIGHLANDS BORO WD 2	40 24 41	074 02 34	01	211EGLS	79-09-12	13.5	186	6.9	4.7
284	MATAWAN BORO WD 3	40 25 15	074 14 50	01	211ODBG	79-09-13	12.5	78	5.7	3.2
195	KEANSBURG BORO WD 5A	40 26 21	074 07 43	01	211ODBG	79-09-12	14.0	83	6.3	4.8
111	W KEANSBURG WC-HAZLET 1	40 25 33	074 09 32	01	211ODBG	79-09-13	13.5	65	6.3	1.3
112	W KEANSBURG WC-HAZLET 2	40 25 37	074 09 33	01	211ODBG	79-09-13	13.5	68	6.4	1.2
197	KEYPORT BORO WD 7	40 25 35	074 12 14	01	211ODBG	79-09-13	14.0	61	6.1	1.6
199	KERR GLASS CO	40 25 42	074 12 20	01	211ODBG	79-09-13	14.0	70	6.1	1.6
294	MATAWAN BORO WD 1	40 24 27	074 13 45	01	211ODBG	79-09-13	13.5	83	6.0	1.6
317	SEA COAST PRODUCTS 1	40 26 12	074 05 11	01	211ODBG	79-09-12	15.5	116	6.3	6.2
191	KEANSBURG BORO WD 6-68	40 26 20	074 07 42	01	211ODBG	79-09-12	13.5	90	6.2	1.6
196	KEANSBURG BORO WD 3	40 26 28	074 07 44	01	211ODBG	79-09-12	13.5	78	6.6	1.5
453	UNION BEACH BORO WD 3-77	40 26 32	074 10 51	02	211FRNG	79-09-13	14.5	81	6.6	1.9
456	INT FLAVOR FRAG 3-76	40 26 40	074 09 04	01	211ODBG	79-09-13	13.5	67	6.3	1.3
424	INT FLAVOR FRAG 2	40 26 41	074 09 11	01	211ODBG	79-09-13	--	66	6.4	1.4
423	INT FLAVOR FRAG 1	40 26 41	074 09 19	01	211ODBG	79-09-13	13.5	67	6.3	1.3
320	NPS-SANDY HOOK 5A-70	40 27 05	073 59 59	02	211MGRR	79-09-12	19.0	121	6.6	5.1
462	KEANSBURG AMUSE. PARK CO	40 27 17	074 08 16	01	211ODBG	79-09-13	13.5	139	6.4	20

Geologic unit (aquifer):
122KRKD - Kirkwood Formation
211MLRW - Mount Laurel Sand-Wenonah Formation
211EGLS - Englishtown Formation
211ODBG - Magothy Formation, Old Bridge Sand Member
211FRNG - Raritan Formation, Farrington Sand Member
211MGRR - Potomac-Raritan-Magothy Aquifer System

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

MONMOUTH COUNTY--Continued

LOCAL IDENT-I-FIER	DATE OF SAMPLE	ELEV. OF LAND SURFACE DATUM (FT. NGVD)	DEPTH OF HOLE, TOTAL (FEET)	DEPTH OF WELL, TOTAL (FEET)	DEPTH TO TOP OF WATER-BEARING ZONE (FT)	DEPTH TO BOT-TOM OF WATER-BEARING ZONE (FT)	DEPTH TO TOP OF SAMPLE INTER-VAL (FT)	DEPTH TO BOT-TOM OF SAMPLE INTER-VAL (FT)	PUMP OR FLOW PERIOD PRIOR TO SAM-PLING (MIN)	FLOW RATE, INSTAN-TANEOUS (GPM)
BRIELLE BORO WD 1	79-07-31	33.00	154	153	129	150	130	150	120	400
MANASQUAN BORO WD 6	79-07-31	10.00	--	180	--	--	--	180	30	550
MANASQUAN BORO WD 3	79-07-31	15.00	--	118	--	--	--	--	10	500
MANASQUAN BORO WD 2R	79-07-31	21.00	122	118	102	118	103	118	15	500
MANASQUAN BORO WD 5	79-07-31	15.00	118	117	94	117	97	117	20	1000
SEA GIRT BORO WD 6	79-07-31	21.00	--	130	--	--	80	130	60	400
SEA GIRT BORO WD 5	79-07-31	20.00	--	710	660	--	660	710	20	430
SPRING LAKE BORO WD 1	79-07-31	15.00	750	711	623	707	631	711	10	450
SPRING LAKE BORO WD 4	79-07-31	10.00	675	675	--	--	600	670	180	550
BELMAR BORO WD 2-ELEC	79-08-01	20.00	--	581	--	--	--	--	120	250
BELMAR BORO WD 4-ELEC	79-08-01	15.00	--	679	--	--	601	671	60	350
AVON-BY-THE-SEA WD 4	79-08-01	29.00	1302	1170	1077	1199	1105	1165	60	500
AVON-BY-THE-SEA WD 1	79-08-01	28.00	516	508	401	503	424	504	120	350
ALLENHURST BORO WD 4	79-08-01	10.00	590	570	505	567	525	565	10	480
RED BANK BORO WD 1B-50	79-08-01	40.00	702	692	632	688	637	687	420	1000
KEANSBURG BORO WD 4	79-09-12	10.00	356	351	258	342	280	340	15	950
HIGHLANDS BORO WD 2-NEW	79-09-12	11.00	671	665	610	632	600	660	1440	550
HIGHLANDS BORO WD 3-73	79-09-12	20.00	--	779	--	--	719	779	1440	350
ATL HIGHLANDS BORO WD 3	79-09-12	20.00	581	576	529	564	547	572	210	700
ATL HIGHLANDS BORO WD 2	79-09-12	15.00	--	200	--	--	180	200	15	250
MATAWAN BORO WD 3	79-09-13	90.00	--	271	220	273	231	271	420	600
KEANSBURG BORO WD 5A	79-09-12	10.00	352	350	249	352	290	350	1440	1000
W KEANSBURG WC-HAZLET 1	79-09-13	59.00	--	367	--	--	327	366	120	1000
W KEANSBURG WC-HAZLET 2	79-09-13	44.00	--	352	--	--	312	352	120	1000
KEYPORT BORO WD 7	79-09-13	35.00	414	365	--	--	304	354	480	1000
KERR GLASS CO	79-09-13	20.00	316	315	175	315	285	315	10	200
MATAWAN BORO WD 1	79-09-13	30.00	268	235	214	259	210	235	420	600
SEA COAST PRODUCTS 1	79-09-12	10.00	--	420	--	--	--	--	10	650
KEANSBURG BORO WD 6-68	79-09-12	10.00	--	362	--	--	302	362	120	1200
KEANSBURG BORO WD 3	79-09-12	12.00	--	355	306	354	308	348	20	800
UNION BEACH BORO WD 3-77	79-09-13	10.00	--	540	--	--	--	--	120	800
INT FLAVOR FRAG 3-76	79-09-13	10.00	345	316	--	--	277	316	--	--
INT FLAVOR FRAG 2	79-09-13	10.00	--	326	--	--	302	326	10	300
INT FLAVOR FRAG 1	79-09-13	10.00	--	328	265	331	298	328	10	130
NPS-SANDY HOOK 5A-70	79-09-12	10.00	--	878	--	--	838	878	30	600
KEANSBURG AMUSE. PARK CO	79-09-13	8.00	310	260	187	250	200	250	15	200

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

OCEAN COUNTY

WELL NUMBER	LOCAL IDENT-I-FIER	LAT-I-TUDE	LONG-I-TUDE	SEQ. NO.	GEO-LOGIC UNIT	DATE OF SAMPLE	TEMPER-ATURE (DEG C)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
455	LONG BEACH TWP WD 2	39 32 06	074 15 48	01	122KRKD	79-08-14	16.5	139	7.2	1.7
12	BEACH HAVEN BORO WD 7	39 33 46	074 14 34	01	122KRKD	79-08-14	17.5	65	6.2	3.4
565	TUCKERTON WW CO 4-64	39 36 10	074 20 31	03	122KRKD	79-08-21	15.0	59	6.3	2.9
544	SHIP BOTTOM BORO WD 4	39 38 39	074 10 52	01	122KRKD	79-08-14	17.0	59	6.2	3.2
560	SURF CITY BORO WD 4	39 39 38	074 10 06	01	122KRKD	79-08-14	16.5	61	6.2	3.2
111	HARVEY CEDARS BORO WD 4	39 41 34	074 08 32	01	122KRKD	79-08-14	17.0	67	6.6	2.7
	UNION-UNKNOWN FLOWING	39 44 44	074 12 10	01	121CNSY	79-08-21	12.5	50	4.5	5.0
2	BARNEGAT LIGHT BORO WD 3	39 45 22	074 06 36	01	124MQVC	79-08-14	18.0	371	8.7	1.7
4	BARNEGAT LIGHT BORO WD 2	39 45 24	074 06 32	01	124MQVC	79-08-14	17.5	372	8.5	2.7
569	BARNEGAT WC 3-72	39 45 27	074 14 44	01	121CNSY	79-08-21	13.5	35	4.8	4.6
512	OCEAN TWP MUA 1-60	39 47 44	074 11 29	01	121CNSY	79-08-21	13.0	54	4.6	3.4
22	SHORE WATER CO 1	39 54 22	074 04 58	01	122KRKD	79-08-15	13.5	58	5.8	4.8
540	SEASIDE PARK BORO WD 3	39 54 51	074 05 02	01	124MQVC	79-08-15	16.0	237	8.8	1.5
13	BEACHWOOD BORO WD 4	39 55 30	074 12 21	01	121CNSY	79-08-22	13.0	67	4.5	9.8
508	OCEAN GATE BORO WD 3	39 55 28	074 08 26	01	121CNSY	79-08-22	13.0	49	5.7	5.9
	SEASIDE PARK WD 6-77	39 55 47	074 04 34	02	124MQVC	79-08-15	16.5	247	8.9	1.3
543	SEASIDE PARK BORO WD 5	39 56 07	074 04 43	01	124MQVC	79-08-15	--	247	8.7	2.7
537	SEASIDE HTS BORO WD 2	39 56 36	074 04 39	02	124MQVC	79-08-15	15.5	223	8.7	2.3
538	SEASIDE HTS BORO WD 1R	39 56 36	074 04 39	03	121CKKD	79-08-15	14.0	366	6.3	81
	SEASIDE HTS BORO WD 5-78	39 56 52	074 04 42	01	121CKKD	79-08-15	14.0	80	5.8	9.7
66	TOMS RIVER WC 18	39 57 21	074 12 29	01	121CNSY	79-08-22	13.5	--	5.3	18
452	LAVALLETTE BORO WD 3	39 57 41	074 04 37	01	211EGLS	79-08-15	21.5	350	8.6	2.1
	LAVALLETTE BORO WD 5-78	39 57 41	074 04 37	02	211MGRR	79-08-15	24.0	180	7.7	1.3
100	OCEAN CO WC-NORMANDY 3	39 59 56	074 03 44	02	211MGRR	79-08-16	24.0	166	7.4	1.0
103	TOMS R WC-SILVERTON 1-56	40 00 20	074 07 29	01	122KRKD	79-08-22	13.5	92	6.6	4.5
504	OCEAN CO WC-MANTOLKING 7	40 02 10	074 03 10	02	211MGRR	79-08-16	24.5	178	7.2	1.1
6	OCEAN CO WC BAYHEAD 6	40 04 05	074 02 44	01	211EGLS	79-08-16	20.5	204	8.1	1.0
524	PT PLEASANT BORO WD 7	40 04 09	074 04 06	01	211MGRR	79-08-16	25.0	145	7.3	.8
530	PT PLEASANT BORO WD 6	40 04 54	074 04 13	01	211EGLS	79-08-16	20.5	197	8.2	.7
533	PT PLEASANT BORO WD 4	40 05 01	074 04 55	01	121CKKD	79-08-16	13.0	217	5.4	19
579	PT PLEAS BCH BORO WD 11	40 05 12	074 02 51	01	121CKKD	79-08-16	13.5	99	6.7	12
521	PT PLEAS BCH BORO WD 9	40 05 36	074 02 52	01	121CKKD	79-08-16	14.0	618	6.7	150
523	PT PLEAS BCH BORO WD 10	40 05 51	074 02 43	01	121CKKD	79-08-16	14.0	594	6.5	120

Geologic unit (aquifer):

121CNSY - Cohansey Sand

121CKKD - Cohansey Sand-Kirkwood Formation, Undifferentiated

122KRKD - Kirkwood Formation

124MQVC - Manasquan-Vincentown Formations, Undifferentiated

211EGLS - Englishtown Formation

211MGRR - Potomac-Raritan-Magothy Aquifer System

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

OCEAN COUNTY--Continued

LOCAL IDENT- I- FIER	DATE OF SAMPLE	ELEV. OF LAND SURFACE DATUM (FT. NGVD)	DEPTH OF HOLE, TOTAL (FEET)	DEPTH OF WELL, TOTAL (FEET)	DEPTH TO TOP OF WATER-BEARING ZONE (FT)	DEPTH TO BOT-TOM OF WATER-BEARING ZONE (FT)	DEPTH TO TOP OF SAMPLE INTER-VAL (FT)	DEPTH TO BOT-TOM OF SAMPLE INTER-VAL (FT)	PUMP OR FLOW PERIOD PRIOR TO SAM-PLING (MIN)	FLOW RATE, INSTAN-TANEOUS (GPM)
LONG BEACH TWP WD 2	79-08-14	10.00	--	458	420	456	425	458	10	750
BEACH HAVEN BORO WD 7	79-08-14	5.00	668	668	544	668	572	668	30	750
TUCKERTON WW CO 4-64	79-08-21	10.00	552	497	452	497	463	497	15	400
SHIP BOTTOM BORO WD 4	79-08-14	5.00	605	590	510	597	536	578	120	750
SURF CITY BORO WD 4	79-08-14	5.00	560	560	499	550	517	557	300	640
HARVEY CEDARS BORO WD 4	79-08-14	5.00	508	503	400	--	465	500	30	1000
UNION-UNKNOWN FLOWING	79-08-21	10.00	--	155	--	--	--	--	--	--
BARNEGAT LIGHT BORO WD 3	79-08-14	7.00	657	657	--	--	597	654	30	600
BARNEGAT LIGHT BORO WD 2	79-08-14	7.00	675	646	570	660	593	646	10	600
BARNEGAT WC 3-72	79-08-21	120.00	262	252	186	252	200	250	210	500
OCEAN TWP MUA 1-60	79-08-21	10.00	160	160	125	160	140	160	5	200
SHORE WATER CO 1	79-08-15	10.00	203	203	--	--	177	200	10	550
SEASIDE PARK BORO WD 3	79-08-15	4.00	513	507	452	505	459	503	1440	260
BEACHWOOD BORO WD 4	79-08-22	60.00	--	99	--	--	65	97	10	350
OCEAN GATE BORO WD 3	79-08-22	7.00	--	120	--	--	--	--	10	325
SEASIDE PARK WD 6-77	79-08-15	12.00	--	450	--	--	--	--	1440	400
SEASIDE PARK BORO WD 5	79-08-15	5.00	480	425	370	474	383	425	10	100
SEASIDE HTS BORO WD 2	79-08-15	4.00	500	439	365	430	370	430	--	--
SEASIDE HTS BORO WD 18	79-08-15	5.00	175	175	138	--	144	175	1440	1100
SEASIDE HTS BORO WD 5-78	79-08-15	5.00	--	175	--	--	--	--	10	700
TOMS RIVER WC 18	79-08-22	9.00	103	59	35	80	47	57	120	700
LAVALLETTE BORO WD 3	79-08-15	7.00	1219	1180	1110	1187	1120	1180	--	--
LAVALLETTE BORO WD 5-78	79-08-15	7.00	--	1500	--	--	--	--	--	--
OCEAN CO WC-NORMANDY 3	79-08-16	8.00	1509	1479	1416	1486	1428	1479	120	330
TOMS R WC-SILVERTON 1-56	79-08-22	6.00	237	237	209	236	209	236	180	750
OCEAN CO WC-MANTOLKING 7	79-08-16	10.00	1456	1369	1219	1361	1263	1369	90	675
OCEAN CO WC BAYHEAD 6	79-08-16	10.00	825	818	775	819	778	818	420	320
PT PLEASANT BORO WD 7	79-08-16	15.00	1261	1261	--	--	1183	1219	720	300
PT PLEASANT BORO WD 6	79-08-16	20.00	984	790	739	799	730	790	1440	400
PT PLEASANT BORO WD 4	79-08-16	13.00	178	75	28	75	45	75	10	300
PT PLEAS BCH BORO WD 11	79-08-16	10.00	168	143	129	141	130	143	120	800
PT PLEAS BCH BORO WD 9	79-08-16	11.00	168	134	95	--	96	134	180	750
PT PLEAS BCH BORO WD 10	79-08-16	10.00	--	130	--	--	86	130	10	750

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FACTORS FOR CONVERTING INCH-POUND UNITS TO INTERNATIONAL SYSTEM UNITS (SI)

The following factors may be used to convert the inch-pound units published herein to the International System of Units (SI). This report contains both the inch-pound and SI unit equivalents in the station manuscript descriptions.

Multiply inch-pound units	By	To obtain SI units
	Length	
inches (in)	2.54×10^{1}	millimeters (mm)
	2.54×10^{-2}	meters (m)
feet (ft)	3.048×10^{-1}	meters (m)
miles (mi)	1.609×10^{0}	kilometers (km)
	Area	
acres	4.047×10^{3}	square meters (m^2)
	4.047×10^{-1}	square hectometers (hm^2)
	4.047×10^{-3}	square kilometers (km^2)
square miles (mi^2)	2.590×10^{0}	square kilometers (km^2)
	Volume	
gallons (gal)	3.785×10^{0}	liters (L)
	3.785×10^{0}	cubic decimeters (dm^3)
	3.785×10^{-3}	cubic meters (m^3)
million gallons	3.785×10^{3}	cubic meters (m^3)
	3.785×10^{-3}	cubic hectometers (hm^3)
cubic feet (ft^3)	2.832×10^{1}	cubic decimeters (dm^3)
	2.832×10^{-2}	cubic meters (m^3)
cfs-days	2.447×10^{3}	cubic meters (m^3)
	2.447×10^{-3}	cubic hectometers (hm^3)
acre-feet (acre-ft)	1.233×10^{3}	cubic meters (m^3)
	1.233×10^{-3}	cubic hectometers (hm^3)
	1.233×10^{-6}	cubic kilometers (km^3)
	Flow	
cubic feet per second (ft^3/s)	2.832×10^{1}	liters per second (L/s)
	2.832×10^{1}	cubic decimeters per second (dm^3/s)
	2.832×10^{-2}	cubic meters per second (m^3/s)
gallons per minute (gal/min)	6.309×10^{-2}	liters per second (L/s)
	6.309×10^{-2}	cubic decimeters per second (dm^3/s)
	6.309×10^{-5}	cubic meters per second (m^3/s)
million gallons per day	4.381×10^{1}	cubic decimeters per second (dm^3/s)
	4.381×10^{-2}	cubic meters per second (m^3/s)
	Mass	
tons (short)	9.072×10^{-1}	megagrams (Mg) or metric tons